



Class RG121 Book E88









LETTERS TO LADIES,

DETAILING

362

IMPORTANT INFORMATION,

CONCERNING

THEMSELVES AND INFANTS.

BY THOMAS EWELL, M. D.

OF VIRGINIA.

Honorary Member of the Philadelphia Medical Society, and former Surgeon to the Navy Hospital of Washington City.

WITH NINE ENGRAVINGS.

PHILADELPHIA of Washing

PRINTED BY W. BROWN, PRUNE STREET.

4817.

District of Pennsylvania, to wit :

BE IT REMEMBERED, That, on the ninth day of September, in the forty-second year of the Independence of the United States of America, A. D. 1817, Thomas Ewell, of Virginia, hath deposited in this office the title of a book, the right whereof he claims as proprietor, in the words following, to wit:

"Letters to Ladies, detailing important information, concerning them"selves and infants. By Thomas Ewell, M. D. of Virginia. Honorary
"Member of the Philadelphia Medical Society, and former Sur"geon to the Navy Hospital of Washington City."

In conformity to the act of Congress of the United States, entitled "An act for the encouragement of learning, by securing the copies of maps, charts, and books, to the authors and proprietors of such copies, during the times therein mentioned."—And also to the act entitled "An act supplementary to an act, entitled "An act for the encouragement of learning, by securing the copies of maps, charts, and books, to the authors and proprietors of such copies, during the times therein mentioned," and extending the benefits thereof to the arts of designing, engraving, and etching historical and other prints."

D. CALDWELL,
Clerk of the district of Pennsylvania.

LETTERS TO LADIES,

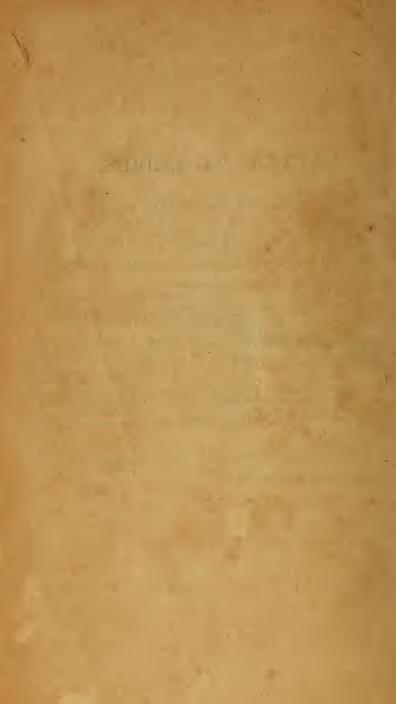
EXPLAINING PARTICULARLY,

First, The means of purifying the personteeth and mouth—and of preventing and curing the diseases peculiar to women.

Secondly, The services they should direct, superintend, or perform for each other at births, to supersede the employment of men midwives.

Thirdly, The treatment of children for the prevention and cure of their disorders.

And several other subjects of importance to be understood by women.



DEDICATION.

To the Wives of the Ministers of the Gospel of the United States.

LADIES,

It is not more on account of your respectability that I inscribe these Letters, than from the influence which your example must have with the generality of your sex. You will never refuse to join in the work of promoting female delicacy and usefulness; and therefore I ask you not only to read these letters seriously, for your own good, and for the good of the offspring rising to take charge of the country—but to assist me in persuading all women to devote a few hours to the consideration of the subjects thus pressed upon their attention.

In the fulness of prosperity, with feelings of health, of comfort, of pleasure, we seldom think of the sufferings of others, of the sufferings which may come to ourselves. But others are encountering pains, and to ourselves diseases are advancing! To lessen the one, to ward off the other, where is the rational woman who could withhold her powers? The road to the Eternal Heaven is through humanity; the road to earthly happiness is through health, preserved by the vigorous application of sense; roads never to be traversed by those who entomb their powers. It being declared in the gospel, that future rewards will vary as one star differeth from another, you should bear in remem-

brance, that the more useful and attentive will not only live in superior enjoyments, but in a better world will move in greater glory. Such a stimulus for each of you to exert yourselves, that you may for ever feel the blessings of doing and receiving good, should overpower every opposing inclination.

To make yourselves, and to persuade the sex to become acquainted with the subjects of these letters, is not all that I have to suggest to you. I have to entreat you to induce your husbands to solicit subscriptions of money from their respective parishes, to establish, at the capital of the union, au institution for promoting these important objects. The plan is annexed, and so unexceptionable, that, if earnestly attended to, must eventuate in the foundation of an establishment for relieving, in the best manner, the poor in child-bed, for instructing women correctly in the principles of midwifery, and for supporting those who have not funds for their expenses during the study; so that the ladies in every part of the country may receive some female operator; inspiring confidence in all, and relieving many from mutilation and death.

That you may be instrumental in founding so great an institution, which will be a monument to humanity, which will be for ever remembered and felt by your country to its remotest parts, is, ladies, one of the warmest prayers of

> Your obedient servant, THOMAS EWELL.

Plan for establishing an institution for the benefit of the poor and rich women and infants throughout the United States.

- 4. Every minister in the United States to solicit from his congregation, publicly or privately, on or before the beginning of the ensuing year, such contributions as can be obtained.
- 2. Each shall retain the amount in his hands, until publicity is given of the formation of a society in the District of Columbia, composed of all the ministers of the District.
- 3. The ministers (it is supposed impossible that any one can refuse to co-operate) shall assemble and form such a constitution, and appoint such officers as they shall approve.
- 4. The officer appointed shall then receive one half the amount paid to each minister, and the society shall immediately purchase a large square in the City of Washington, if the government refuse to give it for the purpose, and erect thereon, instead of an ostentatious building, numerous plain small houses, adjacent to each other, for receiving all women in advanced pregnancy, who may desire to be admitted, without respect to persons or forms, who shall be supplied with needful articles, and good attendants.
- 5. The society shall appoint such physicians as they may deem best qualified to instruct (until one

woman becomes qualified) all women who shall attend to acquire a knowledge of the business of a midwife, in a course of lectures to be delivered every three months. The attendants always to live in the houses, to witness the delivery of those in labour; and after attending two courses of lectures, shall undergo examination, and, if found qualified to act, shall receive a certificate from the physicians of the same.

6. The ministers receiving the subscriptions shall retain the half, and, from time to time, apply it to the support of such females of their parish, as are desirous of learning midwifery, and cannot defray the expenses.

PREFACE.

A LONG time has elapsed, since I promised a publication on the subjects treated of in these letters. Though constantly solicitous to have a few weeks spared from my pressing engagements to prepare them, I could not earlier succeed. I have seized the first opportunity, and although I have not delayed to give a better dress—the substance, the doctrines, the directions, are as I wish, and may be safely relied upon by the ladies.

It was my intention, at one time, not to have annexed my name to these letters, as I was not ambitious for any other feeling than that of having made the attempt to serve the sex. But it soon appeared indispensably necessary, that advice on such important subjects, to be properly attended to, should come from a responsible man, of regular professional education.

The part relating to the offices women should perform to each other at births, has nothing to recommend it, but the correctness of the extracts from the best writers, occasionally divested of such technical terms as could be dispensed with. So much has been written on midwifery, and such is the simplicity of the operations of nature for delivery, that it would puzzle ingenuity itself to devise a new idea on the subject; much less an improvement in practice.

I am sensible that it is the opinion of medical characters of mind, that, as the world abounds in such a variety of books, no man should publish, unless he had something new to communicate. My chief object is, the instruction of those, who know not what has been published. To disseminate, among the uninformed, the improvements of the learned, I consider nearly as respectable as making the improvements. To a mind, thinking only of doing good, the business of dissemination is just as pleasurable as that of discovery. Nevertheless, I am not unconscious of making some original suggestions in this work. Had some of them occurred to those familiar in the make of books, they would have been conveyed in larger volume. The necessity of condensation, on the present occasion, ought not to prevent their receiving full attention. On the subject of exciting the flow of milk from the breasts, particularly in cases of barrenness, I am anxious for an early application, because convinced it will prove of general utility.

How far, in most countries, medicine should be trusted in the hands of common people,—is a question of difficult, doubtful decision: for one presuming medlar has often done as much mischief, as the judicious have done good. But, if there be a country in which medical knowledge may be dif-

fused, it is in the United States, where professional services are so often dilatory and out of time. If there be a part of the community to whom this knowledge should be confined, it is, assuredly, the female part,-at least concerning themselves and children. Their delicacy of frame, and sensibility of system, leading to speedy termination of disorders, renders this knowledge, by them, not of questionable value, but of most important benefit. Instead of giving articles to the sick in their families, contrary to proper treatment, or withholding some little remedy, equal to the cure in the commencement, they might, without much intellectual exertion, acquire such knowledge as would insure essential service; at least until the arrival of physicians. The more they attend to such knowledge. they will be endeared the more; be, as they should, contributory to the interests, as to the pleasures of mankind.

To ladies of good candid minds, no apology will be necessary for the plain manner in which I have stated some subjects, deemed offensive to converse about, yet important to health. Only those of affectation of feeling, can fancy there is indelicacy in understanding what may save from exposure, disease, and death. I was pleased with a French lady, who, shortly after her arrival in my neighbourhood, sent in the night for a physician to her child, suddenly taken alarmingly ill: on his entrance, observing her more than half naked, he was

about withdrawing, when the earnest mother exclaimed, in broken English,- "Sacrez! fool doctor-you let my child die cause I no dressed." It is certain, that the mind in private, with perfect purity, turns to every point, and instead of seizing at extraordinary means on emergencies, we should deliberately, previously acquire qualifications for acting. I am conscious I have pressed in this work several practices, which many of the respectable part of the sex are in the habit of observing, without the advice of a physician. Such directions are offered only to those who do not observe them, and the more earnestly to induce those who do, to assist in inculcating them among the negligent and uninformed. To produce the stronger impressions in other cases, I have purposely repeated the same advice.

PHILADELPHIA, September, 1817.

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The reader is requested to correct, in page 103, line 22, as follows: erase in and insert retro in the word inversion.



LETTERS TO LADIES.

LETTER I.

Containing reasons why Ladies should attend to the subjects of the work.

THE influence of pure, delicate, and cleanly women in society has long been the subject of remark. With the appearance of but little power, they have borne a sway more irresistible than that of males. When mothers have been noble or debased, it has often been the consequence that men have been refined or depraved. In no age has violence imposed on the placable spirits of the sex, without severe suffering; not so much from present loss of pleasure, as from reaction on the rising generation. The interest, the affection, the duty of all require that every effort should be made to preserve women delicate and virtuous; to keep them out of the way of temptation, as well for the present as succeeding societies. Nothing can be more certain, than that in defiance of our wishes and expectations, our own daughters will partake more or less of the prevailing manners of the times; will be pure and refined, or indelicate or unprincipled, according to their associates. It is therefore obvious, that by assisting in the establishment and preservation of good practices in the community, we assist in perpetuating them among those dearest to our hearts.

It was, ladies, from very sincere feelings to promote your welfare that I designed this publication; feelings,

I deem improper, from extending to my own female descendants and dearest friends, whose shield and whose power, in common with their sex, should rest on their virtue, their delicacy, and their usefulness. My first object was, to arrest the useless, the indelicate, the injurious, yet growing practice, of calling on men midwives, in common cases of births; the second object, to ensure better treatment of yourselves and children.

In soliciting your attention to this subject, it is not my desire to make you midwives or physicians. I only ask you to learn the principles of the facts you have already learnt, while gratifying the universal curiosity on the subject of the birth of man. Accurately understand, at least the outlines, leave nothing to fancy, and you will be able to command, to render important services in scenes where you have appeared as idle, useless spectators. You will be able to direct ignorant attendants, as physicians direct nurses at the bed-sides of those delicate patients refusing to exhibit their persons. You will not only save the expense of male attendants, the wives from disgust, and husbands from mortification, but what is of vast importance, indeed, you will always be able to detect, and forbid the officious meddling of the ignorant midwives, sometimes terribly destructive to mother and infant. The great importance alone, of giving these common women proper directions, enabling them ever afterwards to act with propriety, ought to be a sufficient inducement for all of you to attend to this subject.

Many of you pay great attention to the preparation of compositions for eating, you do not consider it improper to learn that this food is ground under the teeth, blended with saliva, swallowed, digested, and then passing through the bowels, is discharged by the organ and at the orifice assigned for the purpose. Truly then you ought not to think it strange, that I should request you to acquire a knowledge of the preparation and passage of the human body. None of your mixtures for eating, nothing in truth, that you have learnt, can be of greater importance. You can acquire all the necessary information in less time than you require for a novel. The famous Cleopatra of Egypt is said to have studied, and written for the public on the subject. Should affectation of feeling induce you to say that it is too indelicate—how inconsistent will be such an assertion with an unnecessary exposure of your persons at births, to the hands and eyes of physicians.

Indeed, it is on account of your delicacy, that I intreat you to acquire valuable information respecting your own structure. Nature has given you functions to perform, every body knows you perform them; and can you seriously think there is as much indelicacy in endeavouring privately to acquire accurate information, as there is in your neglect to do it, rendering it almost indispensable to expose yourselves to the hands and eyes of strangers?

There is not the least reason in the common aversion of mothers for their daughters to be acquainted with the history of generation before their marriage. Ignorance of any subject appearing mysterious, naturally tends to the excitement of curiosity; and it is very likely this ungratified curiosity to learn the nature of generation, has inclined females to dishonourable connection. According to reason and common sense, assuredly it must appear, that for inquisitive girls to act with prudence, it is best they should be instructed plainly, that they should be told, as Milton represents an angel sent to Adam in Paradise, declaring, that sexual connection is not the heaven or hap-

piness of a rational mind; that it is an operation common to brutes. Learning that there is nothing so greatly desirable about it, so wonderfully mysterious, they must be less inclined to yield to a dishonourable prostitution. They will the more readily believe, that to be rational and proper, there must be a refined regard for the object of their love, and their union with him, consummated according to the usages of the virtuous. Indeed, it clearly appears to my mind, that a young lady, understanding the whole subject, not having had her fancy inflamed by a mysterious silence, could not be prevailed upon to tarnish by her conduct, the honour of her sex, and dignity of her family.

But this is not the serious object of my present solicitude. It is to wrest the practice of midwifery from the hands of men, and to transfer it to women, as it was in the beginning, and ever should be. I have seldom felt a more ardent desire to succeed in any undertaking, because I view the present increasing practice of calling on men in ordinary births, as a source of serious evils to child-bearing: as an imposition upon the credulity of women-and upon the fears of their husbands: as a means of sacrificing delicacy, and consequently virtue: as a robbery of many of the good common women of their proper employment and support. Truly it shows as extraordinary a revolution in practice, as any afforded from a survey of all the arts. That all females do bring forth their young without assistance, excepting the human in a state of civilization; and that women should call for the assistance of men, the only animals tormented by jealousy, is a fact that will scarcely be credited in a Turkish Harem, or by the christians of some future and purer age. Should the strangers to the practice, inquire if our men have large unwieldy handsgreat curiosity about women; should they ask if our women had the requisites for useful services—small hands—good sense of touch, and patience in attendance—they will absolutely deny this monstrous perversion of the course of nature.

From the peaceful and retired occupations of women, they are generally more numerous in the community than men. Nevertheless, the men have assumed several offices, properly belonging to the weaker sex. The natural consequence is, that many women, as men in similar circumstances, wanting profitable occupation, seek the employments of the vicious. In as much, therefore, as these men midwives have meddled with this proper business of women, they have been instrumental in the depravity of many. Indeed, it is owing to their acting where they are not required, that the female practitioners are so often ignorant—not having the opportunity or means to qualify themselves for attendance on ladies.

Several observing moralists have remarked, that the practice of employing men midwives, has increased the corruption among married women. Even among the French, so prone to set aside the ceremonies among the sexes—the immorality of such exposures has been noticed. In an anecdote of Voltaire, it is related that when a gentleman boasted to him of the birth of his son, he asked who assisted at the delivery: to the answer a man midwife, he replied, then you are travelling the road to cuckoldom. The acutely observing historian of nature, Count Buffon, (on puberty) observes, "virginity is a moral being, existing solely in purity of heart. In the submission of women, to the unnecessary examinations of physicians, exposing the secrets of nature, it is forgotten that every indecency of this kind is a violent attack against chastity—that every situa-

tion which produces an internal blush, is a real prostitution." It is very certain, where these exposures have been most common, as in large cities, there adultery has been most frequent. Be it folly, or prejudice, or not, there is a value in the belief, that the husband's hands alone are to have access to his sacred wife. Break through the prejudice, if you please to call it so, but for once, unless powerful reasons command it, the rubicon is passed; and rely upon it, the barriers, on future emergencies, will not be so insuperable. Time and opportunity to press on a grateful heart, for a favour in regions where magnified favours have been conferred, have been used, and more frequently desired. To convince you of this, you will not require meto enter into the secret history of adultery. Many of these modest looking doctors, inflamed with thoughts of the well-shaped bodies of the women they have delivered, handled, hung over for hours, secretly glorying in the privilege, have to their patients, as priests to their penitents, pressed for accommodation, and driven to adultery and madness, where they were thought most innocently occupied. In one case, I was well assured, that a physician in Charleston, infuriated with the sight of the woman he had just delivered, leaped into her bed before she was restored to a state of nature. The melancholy tale of the seduction of the wife of a member of congress from Carolina, by her accoucheur, is a warning that ought not to be disregarded. The beautiful organization of the lady preyed on his mind for years: he sought her from one to the other extremity of the country, regardless of all dangers; and on acquiring his game, received a premature and violent death-leaving horror and ruin in the family he had been hired to serve.

Whatever you may think on this subject, there are many

husbands to whom the idea of their wives' exposure of person, is horribly distressing. I have heard of cases, affording singular mixtures of the ludicrous and distressing. In one case in my neighbourhood, the husband sent for his physician to his wife in labour, yet was so strongly excited at the idea of her exposure, that very solemnly he declared to the doctor, he would demolish him if he touched or looked at his wife. No man possessed of a correct and delicate regard for his wife, would subject her to any exposure to a doctor, that could be avoided without danger.

But the opposition, the detestation of this practice, cannot be so great in any husband, as among some women. The idea of it has driven some to convulsions and derangement; and every one of the least delicacy, feels deeply humiliated at the exposure. Many of them while in labour, have been so shocked at the entrance of a man in their apartment, as to have all their pains banished. Others, to the very last of their senses, suffering the severest torments, have rejected the assistance of men. There have been many of this description in all ages! virtuous and sainted souls-they preferred dying in all the agonies; the throes, and the convulsions of fatal labours! They did err on the side of delicate feeling! but their errors will be blotted out for ever! To be instrumental in relieving one of this truly interesting cast, will be a heavenly consolation to all who can be alive to the pleasure of serving the virtuous.

It requires but a little understanding of this subject, to enable you frequently to prove of great service in removing the fears and forebodings of many ignorant sufferers, who imagine that only professional skill can afford relief. Many such objects of commiseration have languished day

after day, solely from the want of a little information in one of the attendants; all unnecessarily lamenting that physicians cannot be procured. By a little information, you can at all times prevent the miserable mutilation of mother and child, which has frequently been committed in a shocking manner, solely from the grossest ignorance. Indeed, to be able to say to ignorant widwives, fancying they must be doing something continually, "Thou shalt not interfere—thou shalt not meddle with nature," will alone be sufficient to effect essential service. On other occasions. and in all parts of the country, sudden labours coming on, before proper attendance can be had, you will be able to do important good to mother and child. One case of suffering of this kind, from want of assistance, in my opinion, is a great reflection on the ladies who are convenient for attendance. Indeed I think it disgraceful, that any female should be allowed to grow up in ignorance—in pursuit of pleasure, too fancifully nice—so falsely delicate, as not deliberately to get so much knowledge in one hour, as will enable her to do, or to direct the unlearned servant, how to perform the little offices required on the emergency, to which all of them are subject.

It is not to be disguised, that all classes in the community have to deplore the loss of some friend in child-bed. Many are mourning at the loss of amiable wives—victims to what ought to have been the subject of their joy. Parents are still lamenting the premature death of their daughters—buoyed up with the hopes of feeling as mothers, when the pains of labour were forgotton. Innumerable babes have been sacrificed in the most afflicting manner; many of whom may have become ornaments to their country. All such calamities may have been prevented, if but one lady in the neighbourhood of each case, had

have devoted but a part of the time spent in guessing about the operation, to an accurate knowledge of the subject, so that she might have directed the ignorant and meddling attendants. It is said the Lord declared he would save the city of Sodom if but ten men were found good in it; and surely it is equally certain, that the whole of you should attend to this subject, with the prospect, even that only ten might be called on to render the needful assistance.

Every day shows that the practice of midwifery requires no particular skill, no superior knowledge, no slight of hand, nothing beyond the most common sense and observation, to do all that is required with perfect success. Nature has so wisely provided for the birth of the young, that even the extensive practice so highly rated among ladies is not necessary for the discharge of all the duties required from attendants. The male practitioners, who in general, from accidents, have got into great repute, received their first impressions from books, from directions which any one in the country can comprehend. The increasing applications to these women doctors, remaining satisfied with such business, are really made in vain; for most commonly, in qualifications they are not far removed from the sisters of the profession. Physicians of the best abilities, discovering, that it is by the fingers instead of the talents, that many get the most profitable business, attend to this subject only in the beginning. An introduction into better occupation, excepting in the cases of their favourites, is almost invariably followed by an abandonment of midwifery; so that the ladies have often to look out for different attendants.

In some parts of our country, the negro women, feeling their ignorance, and fearful of hurting their mistresses,

hesitate in acting, until they accidentally discover the powers of nature; then they obtain great reputation in the practice of widwifery, rivalling the most renowned doctors of the trade. They soon discover the secret, that nature does all the business, and that they have only to keep themselves quiet, and pocket the credit of the operation.

During the simplicity of the early ages, women alone officiated at births. In Egypt, the cradle of so much science, they were the sole actors. At Athens a law was passed forbidding them to practise; but from perseverance among the delicate, preferring death to exposure, the law was speedily repealed. Since then no government, it is believed, has been so ridiculous as to compel such unnatural interference. In consequence, the practice has been confined to women, until within a few years, in some European countries and their colonies. The excessive spirit for meddling with women is no where so great as in France. They are so fond of indulging their curiosity at births, that they even attend on the domestic animals in labour. Mr. S. told me, that he witnessed the operation by a professional character for cows. The cow, displeased with his intrusion, made all possible resistance; and when it was over, for hours endeavoured to attack the meddler. There is a stronger sense of propriety among the northern neighbours of the French. The Danish government, viewing the employment of men midwives in natural labour, as highly improper, established schools for the instruction of women in the principles of midwifery. Several of the German states have imitated the example. The American government should establish such institutions. The legislators in congress would thereby render the nation more essential service than they have done for years.

If the difficulty of obtaining doctors at the proper time; if the indelicacy and tendency to immorality of having them in any but the critical and unnatural cases; if the propriety of giving to helpless women proper encouragement and support; if the salvation of many women, who, shocked at male interference, have their pains vanished, and minds deranged, and who sometimes prefer death to exposure; if the salvation of many children born almost without warning; if the prevention of the destructive interference of ignorant attendants cannot, united, induce you to attend to this subject, the mechanical advantage between a man's and a delicate woman's hand, ought to command your decision, in favour of employing and encouraging female assistants. Such is the confined organization of the parts for our birth, and such the large size of men's hands, that I verily believe as much mischief as good has been done by them, as has been stated by more extensive observers than myself. I conclude with the remarks, that when professional assistance becomes necessary, from unnatural occurrences, the case is altogether altered. The exposure is not of parts in a natural state, but deranged; the woman becomes a patient for his operation; is a subject of commiseration; and the solicitude to remove her danger and agonies is the only thought a man can have. In such cases, there ought not to be the least hesitation in the female to submit to examination; there is no indelicacy in it. Religion, future usefulness, command that life should be preserved at the expense of an hundred such sacrifices. The rule that I would prescribe to the females for whom I felt most affection and solicitude would be that which I now urge, on no account submit to the interference of men in common labour; do it most readily in the uncommon cases,

when a nurse under the direction of a physician cannot afford relief. I will venture to add, that there is not a physician, disinterested, of sound sense, who would not approve of the rule. The best authors on midwifery decidedly recommend it.

An acquaintance with the subject of these letters will enable you to be of service to more than those in childbearing. The rational treatment of your own peculiar disorders, often so injudiciously conducted, the prevention and cure of children's complaints, so interesting to every woman of extended feeling, are taken into consideration; subjects well worthy of your serious attention. If no other benefit can be derived, but that of preventing the administration of improper doses, it will not be inconsiderable. Many disorders are rivetted in you, and especially in children's constitutions, by taking articles contrary to the indication for cure. So many of you are inclined to quackery, to believe in stories of cures from the prescriptions of common people, that it is an important point to impress on your minds, that our bodies are subject to laws, our diseases to be cured according to principles. If you will seriously believe this, will believe that medicine is a rational science, you will increase the respectability of the profession, and your own safety, by always selecting for your physician the man of sound mind, who reads the books of his profession, instead of the pliant, fin cal, " lady's doctor." You will discover that your diseases are to be prevented and cured; not by the compounded trash of apothecary shops, but chiefly by the rational use of what may be termed the family materia medica. Cold and heat, in water and in air, bleeding, rest, exercise, mechanical irritation of the skin, an oiled feather to excite vomiting, and glysters to excite purging.

LETTER II.

Contents. Cleanliness—warm bath—advantages from its daily use—cure for rheumatism—air bath—cold and sea bath—local washing—purification of feet—certain prevention of colds—purification of arms—great advantages of sitting daily in cold water—regular evacuations—certain cure of costiveness—prevention and cure of piles—warts—boils—fistulas—excoriations—mouth—preservation and extraction of teeth—tooth powder—of the skin—preservation of its beauty—means of preserving general health—softening the hands.

An attentive observer of mankind has said that all persons are pleased with the odours escaping from their own bodies, while no one likes those from another, of the very same nature. Although Dr. Swift defines a cleanly person, one with nasty ideas, yet we are all most pleased with the cleanly; I mention this, as introductory to some most disagreeable, though useful reflections, necessarily contained in this letter.

In order to find out that "heavenly Chloe," may be discovered by the nose, the smelling powers of a dog, which can trace, through an immense crowd, the footsteps of his master, are not necessary. One with very moderate smelling powers can perceive the odour of several parts of the body, and however agreeable when from one's self, is very disgusting when, as is too often shamefully the case, strikingly perceptible in others. It is a fact, that daily some of

the finest, most tender excitements of love, are shocked away from men and women by the discovery, on a near approach, of some of these offensive odours. You are spoken of, in the most disgusting manner, particularly by the lower classes of society, on discovering that you may be smelt as themselves. Moreover, men of sense really consider your virtue as intimately connected with the cleanliness of your person and habits. Count Rumford remarks, "with what care and attention do the feathered race wash themselves, and put their plumage in order; and how perfectly neat, clean, and elegant, do they always appear! Among the beasts of the fields, those which are the most cleanly, are generally the most gay and cheerful; or are distinguished by a certain air of tranquility and contentment. So great is the effect of cleanliness upon man, that it extends even to his moral character. Virtue never dwelt long with filth; nor do I believe there ever was a person scrupulously attentive to cleanliness, who was a consummate villain." Indeed, it would be difficult to imagine the reason why females were so constituted as to become offensive to the nose, unless for the purpose of suppressing too ardent devotion in males. One might suppose, that nature designed this quality as a defensive weapon; agreeably to which, I would suggest, to those apprehending a rape, to insure protection, by rendering themselves as disgusting as possible. In every practicable manner, on the attack of the assailing villain, the body may be rendered so offensive, as to subdue the brutal passion of the ravisher. Although the liberty of indulging in the worst filth be excusable in such cases, yet, in no kind, in the slightest degree, is it to be tolerated in decent society. I have always thought it a reflection upon every lady in a company, an insult to each member, for one of

them to be discoverable by means of the nose. It would be a moderate punishment, if establishing the rule you would invariably strip and scrub, from head to foot, in spite of all resistance, every unclean person. Indeed you ought to consider the purification of your bodies as the more important, since it is an unquestionable truth, that the best means of doing it, most wonderfully promote health, prevent and cure several diseases to which you are liable. You may be the more disposed to believe this truth, by knowing that the diseases of the body are much more under the controul of those articles nature has abundantly supplied around us, than the various mixtures administered as physic. Physicians of greatest intelligence will tell you, that a correct knowledge of the proper use of the most common articles, will avail you more than a knowledge of every medicine. You ought, therefore, to correct your partiality for dependence upon nauseating doses, from distant countries, in preference to the remedies at hand for every family.

One of the greatest mistakes most frequently committed by young ladies, is the anointment with perfumes, to suppress the natural exudations. It is seldom that this does more than partially suppress the effluvia, and but for a short time: it often does injury, by stimulating the skin to diseased action; and it never fails to suggest to others, that the contrivance is resorted to for the suppression of stronger fumes. As I positively assure you, that I am acquainted with superior means of correcting such smells; means which do no possible injury, never fail of success, and essentially promote health, you ought certainly to abandon the use of all such perfumed compounds, and give the prescription a full and fair trial.

You ought to be apprized, that it is extremely preju-

dicial for the secretions of the various parts of the body, to remain on them. The matter adhering, acts on them somewhat as infectious matter to the body, causing the secretion of more of the kind. The secretion adhering to the surface excludes the air, and stimulates the parts underneath, which the more rapidly secrete; in some cases, particularly with fat women, to such a degree, as to render the atmosphere around them excessively disgusting. The remedy for such a state is the same as that for prevention. It is not to apply any thing to the part, but to remove, in the best possible manner, the matter on the surface, so as to allow the contact of cool air, and the insensible evaporation to go on.

The best means of removing the filth from the surface of the body, consist in the use of an article excessively cheap—one of God's greatest blessings to the human family. It does far more than dissolve, cleanse, and purify every part; it prevents and cures several of your serious complaints. Considering the vast importance of this invaluable article—how often it has escaped your notice passing it by as beneath attention, I am at a loss how to introduce its name. In order to make a deeper impression, I wish I could rouse all your faculties at the development -that I could extort from you a solemn resolve, that it shall be treasured in your remembrance, and daily used in unabating ardour. You need not smile at this pomposity, in introducing the name of this universal cleanser; for if you had never known of it, and could henceforth be prevailed on to give it the fullest trial, you would do homage to its powers more extravagantly than I could speak of them. Hear, then! and remember, it is hot and cold water freely applied to every part. Doctor Sangrado never

extolled it half so much as it ought to have been, when supported by "soaking and elbow exertion."

The most effectual means of washing the whole body, is to immerse it for a few minutes daily, in warm water, at the same time rubbing it with a coarse hair brush, to take off the scales and filth of the skin. This entrance in the bath will have a most powerful effect indeed, in prolonging your lives, and exempting you from disease. I cannot say too much in favour of the cleanly, healthy, invigorating practice.

An idea of the vast importance of washing the whole skin of the body in a bath, may be formed by adverting to the effects of it among the Romans. Physicians were of a respectable order in the community, until bathing became general. The free use of the bath prevented so many disorders, ending in such inconsiderable demand for doctors, that barbers performed their ordinary duties.

In like manner, the standing of the medical faculty was reduced in France, after the general introduction of the bath. The French women are particularly partial to free washing; and in consequence, seldom think of a doctor, excepting for the fashionable occasion of an accouchment. An American physician who visited Paris for the purpose of improvement in his profession, assured me that he had often endeavoured in vain, to smell the odours with which we are so frequently assailed in this country—sometimes among persons in elevated stations.

The experience of those in our own country, who make a daily use of the bath, is just as impressive. They are not subject, in general, to half of the disorders afflicting those who suffer their skins to remain besmeared and covered with the exudation from the pores. The females of the southern states, who frequently bathe during the summer, derive great benefit from the operation. The advantages derived from visiting the water places, unquestionably depend more on the washing of the skin, than on any medical qualities in the water.

Indeed I think after viewing this subject in the fairest light, on account of humanity and pleasure, every person ought to be compelled to bathe daily in warm water. The means of warming water are in the hands of every one, without incurring the expense of additional fire. If a small excavation be made in the funnel of chimneys, a pot may be fixed, around which the smoke passing, will give a sufficiency of its heat to make a large quantity of water of the requisite warmth. But the plan giving least trouble, is that of heating water to scald hogs in the country. It is to put stones and old irons into the fire, and when heated, to throw them to the bottom of an open mouthed barrel of water. Two or three of such bodies can always be kept without inconvenience, in every fire-place, and will suffice in a few minutes, to make the water of the proper heat. As soon as this is done, they can be removed, and the person sitting in the barrel, will have a most pleasant mode of purifying every part. I consider the suggestion of applying this mode of warming water for your daily baths, as worthy of your remembrance and observance.

Rheumatism. I ought not to pass over the subject of the warm baths, without alluding to its efficacy in preventing and curing rheumatism. I do not mean to say it is a certain cure, but it is assuredly one of the greatest ever discovered. In an extensive ward of a large hospital, I have seen it the only prescription; and only a few were not relieved by it—these few essentially benefited. The water should be very warm, and the patient remain in it from 30 minutes to 2 hours, having his skin well rubbed during

the time. On coming out, the part affected should be covered with finely carded cotton, which has been found remarkably efficacious in relieving the pains of long standing rheumatism. Flannel bandages passed around the affected limb, have been also found efficacious in this disease.

Air Bath. Dr. Franklin discovered that our health was considerably promoted by exposing our persons naked every morning to cold air for a few minutes, and then returning to bed a little while before dressing. This exposure to air favours evaporation from our skin, and has considerable effect, therefore, in cleansing the body, increased by the glow, or sense of heat felt on the surface, which promotes the evaporation, while it tends to prevent internal disorders. Much good would result from its universal observance.

Cold and Salt Bath. The use of the cold bath every morning could not fail to answer the purpose of promoting health, more effectually than the air bath. Persons generally suppose a great deal of water is necessary to be poured on the body, but it is a mistake. The object is to shock the system, so as to rouse action on the surface; and a quart of water splashed on the back suddenly, and running around the body and down the legs, will answer all the purpose. Instead of the ordinary preparations, to stand on the hearth, and some one, (or one's self can do it) to turn over on the back the water in a basin or cup, is all that is necessary. When it is desired to use the sea bath, you can always have it by adding half a pint of salt to half a gallon of water. The salt assists in stimulating the skin; and is such a powerful remedy, that it will much more certainly cure periodical diseases, as intermittent fever, than Peruvian bark. It gives such vigour, is so cheap, that it should be used daily in every family. As I shall frequently prescribe this mixture, I wish it to be remembered under the name of the salt bath. The substitute for general bathing is local washing; and I commence with the feet.

In some persons they are so disgusting, as to be intolerable; and persons taking up the idea that it is natural, give themselves no trouble about purification, unless it be now and then to make them worse, by putting some perfume on them. But there is nothing more certain, than that the smell may always be prevented, by constant daily washing in soap and water. They should be rubbed and scraped hard. It is proper to guard against wearing old shoes, as old leather increases the odour.

Before I pass over the subject of the feet, I wish to communicate to you a real discovery by an old woman, for preventing the colds or catarrhs, which annoy so many of us. It is, every morning before dressing, to dip the feet in a basin of fresh cold water, to wipe them immediately, and return them to bed for a little while. A glow will be felt, which is a proof of the determination of blood to the part; a determination, which will prevent your receiving colds one tenth as often as you have had, or otherwise might have. The practice can do you no possible harm; and I entreat you to observe it, because I am positive, that in addition to the cleanliness of the practice, it will shield you from many attacks, probably even from those that might end in consumptions. The best remedy for colds is to toast, to scorch the feet every night for an hour or two before going to bed.

The smell of the arms is another point to which more attention should be paid than generally is. Perfumes do here no good. It is water and soap, hard scrubbing, that purifies this region. An idea has been entertained among many, that this is naturally in some

cases too strong to be relieved by washing. But it is a mistake. I declare, that there is no case in which the arm pit cannot be made perfectly mild in its smell, by daily rubbing with soap and a wet cloth. Lime water is a species of lye, and has been preferred by many. When the hair under the arm has been allowed to remain as it were matted in the secretion of the part, the more perseverance will be necessary. Among those who smell so very rank, I would advise the cutting off the hair in the beginning, so that the daily washing may be more effectual in cleansing the skin. I conclude this subject with the remark, that, considering the certainty with which ladies can relieve themselves from this smell in the way pointed out, there is some excuse for the frequency with which they are laughed at by their male attendants, for the puffs inhaled from the arms.

The next subject for which I have to request your attention, is the most disagreeable, but it is best to state it plainly at once; it is the smell peculiar to the posteriors and the adjacent parts. The large quantities of fat in this region with the numerous glands, tend to keep up a constant profuse secretion of strong smelling matter, especially after walking, the most disgusting that comes from our bodies. I have heard some ladies more condemned for neglecting to free themselves from this effluviæ, than for any other negligence. Some of them really have indulged in it so long, as not only to appear partial to it, but to fancy that others must have the same relish. I once knew a physician refuse continuing his visits to a fat lady of wealth, because of the excessive disgust this smell, arising solely from her laziness, gave him. I hope you will pay the more attention to what I have to urge for keeping these parts clean and inodorous, as truly the

means will have a powerful tendency to establish and preserve your health, since the parts are intimately connected with the general system.

The great secret for cleansing, and exempting these parts from disease, is, ladies, do pray remember it, to sit night and morning in a tub or piggin of cold water, with or without soap; and for four or five minutes splash and rub the water around. I feel my want of powers to impress the importance of the observance of this practice. The prescription should be observed from the oldest to the youngest, male and female. The posteriors of most animals are naked; so that, what is secreted is speedily evaporated, with the consequence of their total exemption from disorder. Children frequently throwing up their clothes, so as to ventilate themselves fully, have but few complaints of these parts, and it is certain with us, they would be more healthy, if more exposed to cold air. The substitute for this exposure is cold washing. The matter secreted around is dissolved, and goes off with the water, leaving the air to take off what is afterwards formed in imperceptible evaporation; while the tone of the parts becomes so improved, the action of the vessels so lessened by the cold, that the quantity and quality of the secretion cease to be subjects of attention.

If I can but prevail on those of you who can get piggins and all who cannot procure them, to go daily at the edge of a brook, and to sit in cold water for a few minutes, I shall render you more real service than I could by enabling you to double your fortunes. Indeed, this frequent washing in cold water will prevent your having that distressing complaint, called the piles, as also any kind of boils, fistulas, or inflammations of these parts. Another great and important advantage of the practice, is the tak-

ing away from the birth place, the secretion of the adjoining glands, which is apt to become acrid and offensive; and then irritate and excite the external sources of sexual feeling. There is no doubt, but that such irritation is the cause of premature desires, prostitution, hysterical affections, and diminished growth of the body. As all animals have their growth diminished by such excitements; mothers ought to guard their daughters not only against this, but too early hugging, toying and amorous conversation, which produce the like action. The practice of this cold washing, at least at night, will prove so highly advantageous, that I cannot avoid feeling anxious to induce you, universally to do it. As soon as you get in the habit of it you will find it no trouble, a source of far more agreeable feeling at the time, than washing the face and hands. I beseech you to entreat all your acquaintances, to direct all your servants to follow the advice.

While on this subject, as of equal importance, I would earnestly recommend the visiting daily the necessary at the same hour; never going before or after the fixed hour, unless disease exists. You have heard of great effects proceeding from inconsiderable causes, and this case affords an instance. The diseases brought on by the supposed trifling cause of retaining the contents of the bowels, are great indeed. The retention by the bulk of the matter, produces irritation in the surrounding parts, marked by piles and boils: next, the matter which should be discharged ferments, generates large quantities of foul air, which passing through the bowels, stimulates to diseased action, as any other fumes introduced would certainly do. You will readily admit this, if you will advert to the difference in quality and quantity of the wind escaping from the bowels, when the contents are long retained, or speedily discharged, as often exemplified in children. Most of the cases of colic and indigestion, arise from this cause: also frequently dysentery, and all the diseases arising from parts sympathizing with those affected.

The habit of evacuating the bowels, may be acquired by every one who will take the pains to attend to the means; and this will insure a total exemption from the distressing costiveness of which so many complain. Our systems have been called a bundle of habits: they are perpetually inclined to do one day, what they did the day before. You must have observed the remarkable regularity in the returns of appetite, thirst, sleep, agues, bleedings, and the like periodical excitements. My object is to prevail on you to avail yourselves of this tendency of the system, to establish this habit, to let nothing prevent you from attending to it afterwards. In the beginning, efforts will be necessary; you must be accurate in observing the hour, never going before or after it, unless you are diseased. In obstinate cases, you should use what is called the "sailor's remedy;" which is, to push up the fundament a piece of hard soap, shaped as the little finger, and hold it there until the evacuation comes on. A similar cut piece of wood, with a soaped or greased rag around it, will answer, as also the oiled finger. By persevering in such attempts, the habit will soon be fixed, and it will remind you of the approach of the hour without fail. Again I beseech you to persevere in the attempt, although disappointed in the beginning. The advantages resulting, would compensate far greater labour. If you fully knew the enormous quantities of physic swallowed for correcting costiveness, the variety of diseases brought on by retaining the decomposing contents of the bowels, you would not require again to be told of this certain remedy. I will add, the efforts had better be

made in a necessary open at bottom, for the cool air, on the principle of Dr. Franklin's air-bath, before described, will evaporate the moisture of the parts, and rouse to a new action and determination. This will be infinitely more salutary, as it is more cleanly, than the lazy, disgusting habit of some women who use pots in their rooms.

Piles. This presents itself as a proper place to state what should be generally understood on the subject of the piles. It is a disease which almost every one has at times, varying in degree: from moderate inflammation of the fundament, to the formation of tumours. In the beginning, the anus and its edges, have their sensibility greatly increased: there is a sense of soreness, a feel as if innumerable sharp points were perforating the parts. There is generally an increase of the secretion of the mucus of the part, erroneously supposed the cause of the complaint, as its seat is in the hard parts, the fibres and vessels. Sometimes the inflammation increases considerably, as does the swelling; which often terminates in tumours of a dark colour, which bursting, discharge a dark blood, that affords present relief. other times, the pain extends up the gut, constituting what is called the blind piles. The disease is apt to be attended with fever, and to return at intervals.

The prevention of this loathsome disease is ensured, as certainly as that you exist, by daily washing the fundament in cold water, especially after every evacuation from the bowels. When, from riding or walking, there appears to be an increased feeling in the part, there should be an immediate resort to the use of water. I never knew or heard of one person who ever had the piles, who took the trouble of using this cleanly ablution.

The cure of piles may generally be effected by the hourly application of cold water, made more so by ice, particularly if aided by abstinence in eating and drinking, and rest. When the disease is considerable, it is best to apply a solution of sugar of lead, a tea spoonful to the pint of water, and to keep a rag wet with it constantly on the inflamed parts. I have seen the most distressing cases of it cured by cold water alone, much sooner than by the old modes, with nut galls, alum and supposed astringents. In cases attended with fever, you should bleed, and purge with salts, oil, or calomel, to be repeated until the fever and inflammation subside.

When the pain is violent, in addition to the iced and lead water, sweet oil should be applied: mild mercurial ointment is also proper. When the pain is up in the bowels, more evacuations are proper than in the other cases; but above all, inject freely, every hour or two, cold water. If the pain be great, add two grains of sugar of lead to each injection. Proper attention to this may save you from the most miserable condition that disease can bring you to.

Warts. The parts about the fundament are very subject to warts or tumours, particularly among those who do not sit daily in cold water. When they grow to any considerable size, it is best to tie a small string tightly round each at its origin, or to cut them off with a sharp pair of scissors. As there is no danger in the operation, (though painful,) any one may perform it. The parts should be bathed in lead water, as above, after the operation, and mild mercurial ointment applied to the sores until cured. Free washing will prevent the recurrence of these tumours.

Boils and Fistulas. No part of the system is so subject to inflammation as the fundament; and when inflamed, to degenerate into fistulas, which are running sores through long inflamed passages or canals, formed for the passage of matter. The number of men and women who daily die in

the United States, from neglecting these affections at their commencement, is in reality almost incredible, and should be a warning to you to avoid the like evil. I would have every female affected with the slightest inflammation in this part, to have before her view, until the cure be completed, the most distressing termination, in order that in good earnest she may attend to the subject.

These inflammations are certainly to be prevented by frequent washing in cold water, and daily evacuating the bowels.

The cure is to be effected by cold applications. An hourly application of the coldest water of ice, with abstemious diet, and perfect rest, will be sufficient to relieve lesser degrees of these affections. But when these remedies have been neglected, or when the inflammation still increases, the patient should be blooded freely, should be supped near the part, to which leeches should be applied; immediately after, rags wet with lead water should be applied, and removed every hour or two. If this do not prevent the boil from forming matter, (called coming to a head, or suppuration) then a poultice may be kept on it, of any oily moist article. The moment the matter appears to be formed, and coming to a point, it should be lanced, cut straight in the direction to the anus, the orifice just large enough to allow the passage of the matter. The lancet may safely go half an inch deep: needles have been used for these boils by women, when the matter appears to be near the surface. The best instrument, giving least pain, is the common spring lancet, for opening all boils. After the opening, and the passage of the matter, a poultice of milk and bread should be applied; I have used these made wet with lead water, with advantage. It is by subduing the inflammation of these boils, by evacuations

and cold applications, remedies which the most ignorant can resort to with safety, that the formation of fistulas is prevented. The cold applications are to be continued some time after the cure, to prevent returns, to which the parts are generally much disposed.

When the fistula is but slight, it will be practicable for a woman to cut it open, particularly if instructed by a physician. The dressings should be simply oiled lint, to keep the external parts open till the bottom heals up. In other cases, surgeons must inspect and operate; but the necessity will seldom exist, if attention be paid to the prevention.

Excoriations. Those taking much exercise, by walking or riding, are very apt to have their skin rubbed off, particularly about the thighs. The best remedy I have ever seen tried is cold water. It is proper after washing to apply some oily substance; tallow or hogs' lard answers very well. The moment one feels any part increasing in sensibility, the cold water should be applied as a preventive.

Teeth. The last point which I shall with solicitude press upon you, is the purification of the teeth and mouth.

If possible, this is more all important for your general health, than cleansing any other part. To the scripture, that "out of the mouth cometh forth evils," might have been added with equal truth, "in it are engendered many." It is inconceivable how greatly the whole system is affected, sometimes inflamed, by the mouth. You must have witnessed, that a small quantity of spirit held in the mouth of a sick person invigorates the whole body. A disgusting mouthful frequently excites vomiting in persons not very delicate; and diseases of the mouth almost universally produce serious effects in other parts of the body.

This being the case, as it assuredly is, does it not appear

strange that so many ladies escape sickness and death, who, neglecting their mouths, have the most disgusting matter perpetually generating between their teeth, and carried down to the stomach, there acting as a slow poison in the excitement of innumerable disorders? It is with the utmost pleasure that I am enabled to say to you, the evils from this source may be prevented entirely; that you may all have what all want, a pure sweet breath, as it is called, however defective your teeth, by the means contributing to feelings of pleasure.

After all the researches of doctors, quacks, and ladies, for the best dentrifice; after the use for centuries of simples and compounds, hazarding the destruction of all, and ruining many teeth; after all the inventions of toothbrushes, stiff, soft, then with sponge, the great discovery has at last been made, that the best possible application to the teeth and gums, is an article very cheap, endangering nothing, purifying the mouth, by bringing out the offensive matter formed in it; which important article is commonly called warm water!

The preservation of the teeth depends most on the purification of the mouth. In order to purify the mouth and teeth effectually, they must be washed in warm water morning and hight, besides regularly after eating. The water should be taken into the mouth, the lips held tight, and then freely and strongly agitated by working the jaws and tongue, so that the effects shall be felt on the gums, and the glands of the mouth, as well as on the teeth. No tooth-brush is necessary, the finger answers sufficiently for rubbing; but if you will have a tooth-brush, let it be of the softest kind you can procure; a piece of sponge tied at the end of a stick, answers very well; as does a clean

linen rag. Nothing can be more destructive to gums and teeth than a stiff hair brush.

There is but one tooth-powder I would ever consent to be used. This is vegetable matter, as crust of bread, or common coal, burnt well, and reduced to fine powder. Objections have been made to it, from the fear of darkening the teeth, which are entirely groundless; as the teeth are only darkened when their covering, called enamel, is rubbed away in consequence of the folly of using corrosives and hard brushes. Charcoal has a powerful effect in resisting the putrefaction of all the matter between the teeth. Those who fancy there are better powders, may be allowed to try powdered chalk, soap and water, also, Armenian bole and Peruvian bark; but they should be absolutely prohibited from the use of acids, salts, or any active article. Remember, that the enamel of the teeth once destroyed, can never be restored.

When the teeth, from long neglect, become incrusted with a dark yellowish looking matter called tartar, this ought to be scraped off with a pen-knife, very slowly. There are little scrapers made for the purpose, answering with more convenience. Only the parts of the teeth that have on them the tartar, or foreign substance, ought to be scraped; so that the sound parts will not be injured, as they always are, when hard brushes and active articles are used to wear off, and to dissolve the incrustation.

In cases where the teeth are "rottening," in order to prevent the disagreeable taint they give to the breath, it is best to push in them a small particle of charcoal. Where the hollow of the tooth is considerable, after putting in a little charcoal, there ought to be a small piece of bees' wax pressed over it, to remain as a plug. The facility with

which this plug may be removed is a great convenience, as it enables you to take out at pleasure any matter which may be formed underneath.

There are cases where the enamel of the teeth being broken off by some violent operation (nut cracking) a plug more permanent than wax is necessary. In such cases, a dentist should be employed to insert a plug of gold to exclude permanently from the root of the tooth, the air, saliva, and whatever else may be put in the mouth.

But where the teeth are actually decaying; and in cases where defective roots of teeth, called stumps, remain in the sockets, excepting with pregnant women, they should in every case be extracted; more especially in those cases where the health is delicate. The neglect to do it, has been the cause of the disease and death of millions. I before hinted at the connection between the mouth and the general system. You perceive that children, teething, have a great variety of disorders in consequence of the irritation in their mouths. This connection or sympathy between the mouth and other parts, will appear the more striking, from the facts respecting the transplanting of teeth, which was formerly done frequently. Those who underwent the operation of transplanting were very often subject to diseases almost precisely like those of the venereal nature. They had enlargements of the bones, deep ulcerations, and were cured, for a short while, by mercury, which induced the belief that they were of the venereal kind. This led to the greatest caution in the selection of the person to supply the teeth; nevertheless, the same consequences ensued. At last it was discovered, that the cause of the complaints was the irritation kept up in the sockets of the teeth, by the foreign

tooth inserted; which, of course, led to the abandonment of the practice, and substitution of artificial teeth resting on the gums. Now, what I wish you to remember constantly is, that decayed teeth in the gums produce precisely the same effects; enlargement of bones, ulcerations, bowel complaints, and many other disorders, depending on the particular sympathies of each person.

But few physicians ever think of this subject. It was very early and very forcibly impressed on my mind by two or three cases clearly establishing its importance. In one instance an elderly gentleman, repeatedly salivated for a supposed venereal taint, sent for me, and on my prescription, "take out every defective tooth," he laughed heartily; at length I prevailed on him to follow the advice, and a perfect recovery made him a warm convert to extracting rotten teeth. Deafness has been often produced by decayed teeth in the sockets, and often relieved by their extraction.

Whether you comprehend the reasoning or not, on the subject, you will save yourselves from many tormenting affections by following the advice. Indeed, I am so positive of the great advantages which will result from it, that you will be fully paid for the trouble of a year's study, if you will but remember to compel your doctors to extract your decayed teeth, at least whenever you have any serious complaint. It will at all events be of essential service in lessening the irritation in your systems, inclining them to fever. It will have a great tendency to prevent the adjoining teeth from decaying; especially if, in addition, you will keep the mouth well cleansed with warm water, particularly after eating, and sleeping, without injuring the gums.

Tooth-ache. Before dismissing the subject of teeth, it will be proper to make some remarks on the tooth-ache, to which so many females are liable. The general impression, that this disease is confined to the part affected, is erroneous, in almost every case; the system is in an inflammatory state, and requires bleeding and purging. In all cases, except pregnancy, where the tooth is hollow, it is best to extract it. If this be declined, relief may often be obtained, by putting into the hollow of the tooth a small piece of opium, or camphor, or particles of sugar of lead, or a drop or two of oil of cloves; the gums should always be cut. When the mouth is inflamed, or the cheeks swelled, I would advise a warm solution of sugar of lead (a tea spoonful of lead to half a pint of water) to be held in the mouth for some time, care being taken not to swallow it, and afterwards to wash the mouth with warm water; to be repeated every two or three hours. A mustard plaster, and also cupping behind the ear, or on the neck, have afforded relief; as also cloths dipped in hot water, or in vinegar and water, or in brandy and water, applied round the cheek and neck. A blister plaster on the cheek for an hour or two, to irritate the surface, and divert the action from within, is very good; in cases of long standing, the blisters may be allowed to rise, and discharge for a few days. Those who have sound teeth, ought not to have them extracted for the tooth-ache; because, generally, the next or an opposite tooth becomes equally pained; so that some have, without any good effect, had all their teeth extracted. In these cases, it is proper to pay great attention to lessening the inflammation of the system; and to diverting action from the part, by cupping and blisters externally, with a solution of lead water within the mouth. Sometimes, a solution of alum, also

of white vitriol, held in the mouth in like manner, have lessened the inflammation causing the pain.

Of the Skin. Having said so much on very disagreeable subjects, I proceed to make a few remarks on the mode of beautifying your skin. This is a subject which has attracted so much attention, that I believe, if all the money could be collected which has been expended for the object as well as in payment of physicians, for curing diseases brought on by improper applications, from buttermilk filled with maggets to mineral poisons, it would be sufficient to support all the poor people in every country. All the expense and trouble too have been encountered to no purpose; both women and apothecaries having lost sight of the fact, that the state of the skin depends on the state of the body; that to make it look well, you must make the body healthy.

The great receipt for making the skin look well, is, observe a regular diet of very mild articles, refraining from strong tea, spices, pickles, and all that is pungent, as from intoxicating liquors. Regularly evacuate the bowels, and sit in cold water; pour a quart of water over your bodies every morning, go into the warm bath every night; take more exercise out of doors than you are in the habit of taking in the house; adapt your clothing to the changes of the weather; guard against exposure to a hot sun, with as much regularity as you observe among the horses and cows, that appear to know its poisonous effects upon animal bodies. Especially sleep in rooms admitting fresh air through doors, chimneys, and cracks, but never have the windows opened at night. I wish to press the observance of this the more, as I know the obstinacy with which some insist on having them open. Occasional escapes from violent pains in these show no more the propriety of the practice, than of a man's living thirty years, daily get-

ting drunk, shows that it is healthy to get drunk. I am positive, that, on the average, one half of the fevers of our climate arise from exposure to night air. Our systems can do well in any extreme, but not in any changes. The air of the day is dry, that of the night is humid; at night, too, our bodies, having less action, are less capable of resisting disease. You have observed that a current of wind on the neck at night produces the wry-neck; how much greater must be the effects on the constitution? The habit of sleeping with your windows down will soon be found as agreeable as the reverse; for the air entering at an open door, and through chimneys and cracks, will be fully sufficient for perfect respiration. By adhering to these rules, rely upon it, you will be rewarded, not only with a beautiful healthy skin, but long life, and exemption from many diseases. I warn you never to endeavour to improve your skin, by using, in any shape or manner, the poisonous metallic preparations of lead, mercury, and arsenic.

It is indispensably necessary to shield the face and arms from the sun and a current of air to prevent them from being discoloured by light. But in screening from this, it is improper to cover so as to oppress, and, consequently, excite disease by the great heat retained. The best covering is that which is thinnest, and least pervious to light. If covers could be had of any metallic body, as silver or steel, they would answer best.

The only means of softening the skin consist in oiling it well with sweet oil, at least, on going to bed. Gloves and leather for the neck, oiled and worn at night, are proper for this object. In those countries where large quantities of sweet oil are made, the women apply it freely, and have remarkably soft skins.

To prevent and cure the pimples on the forehead and face, it is proper to wash frequently in cold water. A weak solution of sugar of lead, applied every night to them, would be of service, if aided by exciting action in the lower extremities. Married women have them not; and those who are single would escape them, if they would excite a determination to the lower extremities by walking, riding on horseback, jumping the rope, rubbing the skin of the extremities, and about the same time washing the face in cold water, or a weak solution of lead. Sweet oil, rubbed over the pimples, has also a powerful effect in preventing their return, if aided by the other means mentioned. I suppose it will be useless to make any remarks upon the old fashioned, ridiculous notion, that the face and hands of ladies ought not to be washed in cold water.

I conclude this letter with the remark, that if I have said enough to induce you to do three things; first, to sit daily in a tub of cold water, if not, bathe in the economical manner suggested; secondly, at the same time daily evacuate your bowels; and thirdly, to wash your mouth in warm water, and have your decayed and stumps of teeth speedily removed, I shall have rendered you most essential good. I pray God, that you may not be satisfied until you have a full and fair trial of what so earnestly I entreat you to do. Make the experiment, and the moment you perceive the advantages which I know will follow, then I beseech you to impress it on all the uninformed coming under your notice.

LETTER III.

CONTENTS. Principles of life—of disease—of cures—circulation of blood—secretion—use of fat—starvation—sympathies.

An essential part of the education of every male and female, in my opinion, should be a general knowledge of the outlines of the nature of their bodies, and the principles of the cure of their disorders. Not for the purpose of practising physic, but to enlarge the mind; to habituate it to think rationally on the subject, and to guard against the innumerable impositions of the quacks, as well those who advertise as such, as those of vast boasting experience-deceptious only to the ignorant. Had but the slightest knowledge been cultivated on these points, the world would never have been pestered with the innumerable and preposterous accounts of doses " for thinning the blood, for correcting the bile, for purifying the urine, for dispersing tumours," and for the like ridiculous objects. It is well known how greatly the science of chemistry has improved since the introduction of proper names; and the same would take place in medicine, if the same accuracy were observed. Most of the improvements in medicine were discovered by the common people; and how much greater these must have been, had they understood the principles of the science. The persons feeling the disorders must more accurately describe their varying stages, and the effect of medicines, than their attendants can possibly do.

Although I cannot pretend to give such a full view of the subject as might be best for you, I will proceed to sketch some of the outlines which ought to be remembered.

On viewing the body, nothing is so obvious as that all the animated parts are composed of innumerable fibres, or small particles, which, being endowed with the power of contraction, cause all the actions, voluntary and involuntary, in our systems.

Our bodies grow, and are supported by the food taken into the stomach. The food excites in the stomach the secretion of a solvent called gastric juice; which is adapted to the solutions of the article taken into the stomach, when the stomach is habituated to it. But not so when it is not: thus stomachs accustomed to meat alone, will not dissolve vegetables, and the reverse, unless the changes are very gradually made, from one kind of diet to another. Hence the propriety of our changing diet by degrees. When the food is dissolved in the liquid of the stomach, it is carried along the bowels, and there absorbed, forming chyle, which is carried into a large duct, which empties it into a vein; when, mixing with the blood, it circulates over the system, and soon becomes blood, the article which our bodies require for every purpose.

The blood into which our food is so converted circulates or passes through every part of the body, and supplies to each part matter for its formation and existence. The circulation of the blood is as follows:—there are vessels, called veins, in all parts of the body, which, uniting, carry the blood to the right side of the heart, when the heart contracts, with wonderful power, and throws it into four large arteries, which convey it to the lungs; and then dividing into innumerable small branches, spread all over the

interstices or cells. In the lungs, the blood receives some vital substance from the air, and gives out its useless parts -the whole process is called respiration. After it undergoes this respiration in the lungs, which gives it a very florid appearance, it is collected in small veins, gradually uniting, till they form four large veins, which go directly to the left side of the heart; here the heart contracts, and throws the blood into a large artery, which, dividing, and going all over the body, supplies every part with what is wanted; and then it passes of a dark colour to the veins; and thence as at first stated, repeating the course. The stroke of the heart for propelling the blood over the body, as you will find by feeling the pulse, is in an infant about 120 the minute, of 5 years is 100, of 20 years 80, of 50 years 60, of 90 years 55. This action is subject to great irregularity. Thus, you perceive, the pulsation of the arteries is derived from the heart—that the blood is purified in the lungs by our breathing, and constantly thrown over the body for its various purposes. This, termed the circulalation of the blood, you will find explained in detail in the books of anatomy; it wonderfully displays the wisdom and care with which nature has made our bodies.

It is the union of the little fibres that constitute what is called flesh, or muscles. These fibres possess the capability of contraction, and this is called irritability, or susceptibility, or excitability; by which words you are simply to understand, capability of action. It is on this susceptibility of action that animal life depends. The causes or things which operate on it, are called stimulants; and the action throughout the system is called excitement. Thus you have an abstract of the beautiful, sublime, and simple theory of animal life, as explained by the great Dr. Brown of Edinburgh. Our bodies have capability of action, call-

ed excitability; and stimulants operate on it, producing the various excitements of life.

For health to exist, excitement and excitability must be equal; in proportion to the difference between the two is disease.

Diseases, general or local, of high excitement, are what we call inflammatory, marked by all the symptoms of inflammation, or high action. For their cure, of course, they require reduction of the excitement, by perfect rest, by cold, blood letting, and by other evacuations, as purges, emetics, and the like. All things, in these cases, which stimulate without producing evacuations, must of course be injurious.

Diseases, general or local, of low excitement, are called nervous, or typhus, and are marked by low, weak pulse, &c. For their cure, stimulants are proper, as brandy, wine, bark, &c. All things which reduce or weaken must of course be injurious.

This is the outline of the theory of diseases of our body, from which you will perceive, that the practice of physic is reduced to the simple points of ascertaining what kind of action exists in a person, and what remedies of the nature called for, are best for each particular case.

Now as every disease may, at different times, take on these two opposite actions, high or low, it follows, that the treatment of the same disorder which will cure in one stage will destroy in another! Thus fall, ladies, all the stories of "a certain cure," in any one article, for there can be no one cure for any one disease. If you believe I have not deliberately deceived you in stating the great principles of life and disease, you must cease with your credulity, almost universally believing in the statements of special cures by special mixtures. No more cor-

recting, blood sweetening doses! You will perceive, that such secretions are the result of the diseased actions of the fibres; that cures are to be effected through the solids, the fibres, the active parts, not the fluids without capacity or power of action. For example, in what is called bilious fever, you give an emetic, not to throw off the bile, but to raise the fibres to a new healthy action.

The principle on which cures of disordered parts are effected, has been a subject of great inquiry, though not yet explained as we could desire. There are, however, several doctrines which ought to be understood.

When a diseased action exists, and we suspend it by any means, the tendency of the body is, not to go back to that action, but to its healthy action. Thus bleeding and cold, or any thing raising the system to a new action, so as to suspend the diseased action, the body, from its own nature, returns to its healthy state.

When a diseased action exists in some central part, the excitement of disease on the surface relieves that within. Thus, blisters on the side, for inflammations within; issues, whipping, irritations of the skin, &c. operate in relieving disorders.

In other cases where disordered action exists, it is occasionally cured by that which excites and keeps up for some time a stronger action in the body. Thus mercury, laudanum, and any thing highly stimulating, produces so much action in cases of the venereal disease, as to overcome the diseased action.

The modes of curing according to these rules, can only be understood by those devoting great attention to the practice of physic. The consideration inducing me to state them here is, that you may the more readily admit, that a strong, sound mind is indispensably necessary for the successful application of principles to practice. Hence you must infer, that no doctors you employ can be good who have not extensive, observing minds. A little experience, with a thorough knowledge of theory, are the indispensable requisites for successful practice.

The formation of the various parts of the body presents to the rational mind one of the most curious subjects of inquiry. There have been various theories on the subject. At one time it was supposed to be by filtration, the solids only acting as strainers to let out such parts as were not wanted. The theory that succeeded to this was, that the vessels of each part took on a peculiar action, by which action the substance, whether for one of the secretions, or for the growth of the body, was formed. Seeing that these explanations were not satisfactory, I accounted for the secretions in my inaugural essay in a different manner, which, the more I consider, appears the more correct. This theory is, that the compound fluids of the body entering in different parts, variously formed under various circumstances of minute division, action, heat, and electricity, assume, according to their inherent nature, termed affinities, the respective shape and qualities peculiar to such part. Thus the blood in one part becomes bile, in another saliva, in another urine; and so on, by the exercise of its peculiar attractions or affinities in the parts in which it is passing; precisely on the same principles that in certain states of heat, water appears in vapour, then in the fluid state, then in very hard ice; and so on of every body in nature, assuming the different condition or qualities peculiar to them in each different state in which they are placed. According to this theory, we have only to change the state of any part diseased, in order to change its secretion; this is done in many ways, but most remarkably by exciting contractions in the fibres, as by blood-letting, cold, fox-glove, lead, and the like articles.

It is upon this principle of natural attractions, that when a part of the body is cut open, as in any wound, the parts living brought in contact, attract and unite together, the intervening blood, when in small quantities, forming a medium favouring the operation. I mention this, as it affords an opportunity for representing to you the folly of the many articles applying to wounds to make them heal. Every body has something to recommend for this purpose; with such poor advantage, however, that the escape of wounds from ulceration is a great affair. The great secret, ladies, in curing wounds, is to put nothing on them; not even sugar, salt, brandy, British oil, nor any of the other articles so generally daubed on. When a wound is made, nature supplies the balsam; it is the blood of the part. Bring the sides as closely in contact as possible, immediately, and keep them so by sticking plaster; keep the air excluded by a greased or waxed rag over the edges, and the parts at perfect rest. Nothing is so important as to keep wounded parts perfectly quiet, that the attractions and union may be undisturbed; nothing so important as to keep away all the old women's prescriptions for healing.

The next subject to which I shall request your attention, with the hope of your receiving some practical benefit, is the formation of fat in our bodies. In certain states of the system, the blood, passing through the parts formed for the transformation, is converted into fat, and deposited in places made for its reception. In another state of the system, this said fat is turned into blood. You have no doubt heard that bears go into their dens for the winter very fat, live months without food, and turn out in the spring very healthy, though miserably reduced in

bulk. During the winter their abundant fat has been converted into blood, the article necessary for the various parts of their bodies. Just so with ourselves in fevers. We have fevers, we take no nourishment, we are daily evacuated, we may daily lose blood, in the last stage we shall have more blood than in the beginning of the attack! Our systems have been busy in the transformation of fat in the innumerable cells of our body into blood. Having then an abundance of blood, you should never more indulge in fears from repeated bleedings, when directed by physicians; you should never again so incessantly counteract the directions of physicians, by tempting and almost stuffing the patients with articles adding to the disease! Abstinence, when prescribed by the doctors you confide in, who judge from the state of the patient, should never be counteracted by the mistaken kindness of females. You must believe this, if you view the power of nature in transforming the deposits of the body into the commodity, blood, which is wanted for her purposes. She procures it in her mode without any extraordinary exertion of power or action that we perceive, while, on the other hand, when we attempt the supply by nutritious, stimulating food, the irritation produced does more harm than good.

Although I represent this subject for the purpose of preventing an improper interference in cases where low diet is prescribed, and to prevent an unnecessary uneasiness in those whose sympathies are excited for the sick, from impressions of defect of food; I would not prevent your kindness in supplies of the food proper for the patient. Indeed, without the offices females generally perform, I should look upon recovery from a long attack as a kind of miracle. Our bodies have a strong propensity to return to their old habits; and often the excitement of an action that

has been suspended, will restore the habit of action to every part of the system. The eating of an article, which, by its bulk, restores the stomach to its accustomed state and action, has often, especially when given at the accustomed hour, been very instrumental in restoring health. It is right then to show your kindness, but not in giving articles, and at improper times, in opposition to medical prescription. I could not state to you any thing more, showing the importance of keeping up these habitual actions, than the experience on the subject of fasting. A man who eats nothing for a few days, will become feverish, and expire in a very little time. But if he will preserve the habitual action, or operation of his stomach, although there shall be nothing added to his body, yet he will live in tolerable health for a considerable time. If he will observe the precaution of opening one of his veins, and daily suck in half a pint of blood, his stomach will be kept in action, and his system will supply the deficiency, by forming blood from his inactive fat, for all the purposes of his body, so that he may certainly live, and in tolerable health, forty days and forty nights, without encountering any serious disadvantage. This fact ought to be impressed on every person who may possibly, for short periods, be exposed to total deprivations of food, from shipwrecks, besieges, or any other sources of starvation. If they would have this blood drawn and boiled with water, they would fare with better comfort.

The last subject on which I shall make general observations, is the various connections between different parts, called sympathy. This is one of the most important parts of the study of those desiring to treat the sick with propriety; and affords an additional reason why there should not be a meddling with physic among those not qualified. In consequence of this sympathy, when one part is diseased, another part will take on the diseased action. Thus, when the womb is inflamed, there shall be great sickness at stomach in one person, in another affection of the breasts; the remedy of course to be directed to the part primarily affected. Thus, when the stomach is affected, there shall be excessive pain in the head. When the liver is affected any length of time, the skin, particularly of the face, takes on diseased action. When the stomach is affected, by putrid meat, for example, the skin will become spotted. When a wound is made in one of the extremities, often the parts near the junction of the limb with the body will become affected.

It is often by means of this sympathy that we cure parts affected. We excite the kidnies, for example, to an increased secretion of urine, by water and salts in the stomach. We cause the dispersion of large collections of matter, by the administration of an emetic, and so on.

This short view I have given of a few general principles, I hope will be sufficient to make such a forcible impression on your minds, as will for ever root out all further belief in great cures, by quackish prescriptions, as before observed. Each case of disease occurring, requires the exercise of a sound sense for its treatment. The administering of an article to cure one patient, because it cured some others, must of course be improper, unless there be reason for believing that the state of the different persons is the same. Admitting what I have advanced to be true, can you put further faith in stories of great cures by treatment contrary to principles, to common sense, although many should tell you, although you might fancy you saw the effect yourself? Such instances of recoveries only show the power of nature in restoration; the supposed re-

medy was not the instrument. Could you believe that any stimulating article, as brandy or opium, or the like, could cure an inflammatory fever? or that heat, restlessness, food, or stimulating drinks, could fail making it worse? Could you believe that in diseases of low action, called nervous or typhus, that great evacuations would fail to destroy? Would you believe that moving a child during high fever, would not make it worse, although an hundred told you to the contrary? Indeed, you may believe me, although sometimes it may appear very hard to dose one to death, there is not one disease which is not to be treated according to principles, and not one to be treated according to "guessing."



LETTER IV.

CONTENTS. Menses—history—treatment—excessive—obstructed and suppressed—period of cessation—fluor albus or whites—hysterics—indigestion—healthy food.

I COMMENCE this letter with the remark, that you generally err in attaching so much importance to the periodical discharge, called courses or menses; and in thinking so much of it on the approach of diseases. The apprehensions on this subject, amounting to excessive anguish, which annoy so many women, are entirely groundless. It is not material whether it be great or inconsiderable, regular or irregular, early or late in its appearance.

The following history of this evacuation is from Dr. Denman. "At whatever time of life this discharge comes on, a woman is said to be at puberty, though of this it is a consequence, not a cause. The early or late appearance of the menses may depend upon the climate, the constitution, the delicacy or hardships of living, and upon the manners, as hinted by Rousseau, of those with whom young women associate. Heat appears to operate on women as on fruit, producing earlier ripeness; as the warmer the climate, the sooner the menses appear. In Greece, and other hot countries, girls begin to menstruate at eight, nine, and ten years of age; but advancing north, there is a gradual protraction of the time, till we come to Lapland, where menstruation does not occur till a maturer age, then in small quantities, at long intervals, and sometimes only in the summer.

"In hot climates, women are in the prime of their beauty when they are children in understanding; and when their understandings grow to maturity, they cease to be objects of love. In temperate climates, their persons and minds arrive at maturity at the same time; and by the united power of their beauty and intellect, they become irresistible.

"Some girls begin to menstruate without any preceding indisposition; but generally there are appearances or symptoms, indicating that it is about to take place. These are usually more severe at the first, than in the succeeding periods; pains in the back and inferior extremities, affections of the abdomen, with hysteric and nervous affections. These commence with the first disposition to menstruate, and continue till the discharge comes on, when they abate or disappear.

"The quantity of bloody secretion discharged at each evacuation depends on climate, constitution, and manner of living; but it varies in different women in the same state, and in the same women at different times. In hot countries it is near twenty ounces, in the coldest about two ounces. There is also a difference in the time required for the completion of the discharge. In some it returns precisely at stated periods, in others there is a variation of several days. In some it continues but for a few hours, in others for ten days; but from three to six days is the most usual period.

"At the approach of old age menstruation ceases, the time depending on the time of its appearance; that is, early or late, as it occurred in each case. When it took place at the age of ten or twelve, it ends about the fortieth year; when about the twentieth, it continues till about the fiftieth, sometimes till the sixtieth year; but in middle temperate countries, the period of its cessation is the forty-fifth

year. By this constitution of women the propagation of our species is happily confined to the most vigorous part of life.

"The discharge is a secretion coming from the vessels of the womb, and ceases when impregnation takes place. Sometimes it is confounded with periodical evacuations from these parts of blood, often from the vagina, and erroneously has been supposed to occur occasionally during pregnancy. Of the cause of the discharge it can only be said, it appears to be a provision of nature to accustom the womb to great discharges, preparing it for the supply of the substance constituting the body of the child."

During this evacuation, women ought to be as quiet as practicable. They should be, particularly at this time, extremely cleanly. The statement by Moses of what he supposed the Lord said, "women should not touch any thing after this issue for six or seven days," was designed to ensure greater attention to cleanliness. Morning and night they should sit in a tub of warm water a few minutes, for effectual washing. The common prejudice against the use of warm water in this state should be disregarded, as it is not only of no injury to the general health, but is of real service in lessening the irritability of the part. The diet ought to be rather less than common in quantity and quality. Sudden exposure to cold, rain and alarms, should be avoided, though frequently encountered without injury.

The womb from whence the menses come is subject to great varieties of diseased action; and it is a subject of remark and astonishment, how much the stomach, head and pulse sympathise on such occasions. There are almost always symptoms of hysterics, despondence, sickness at stomach, and low pulse. The chief varieties of its diseased action are classed under the heads of excessive, ob-

structed, and suppressed menstruation. Most women occasionally are affected with different degrees of these varieties. Considering their habits of living, so contrary to the activity for which they were formed, it is astonishing they do not more severely suffer.

The remedy for these affections is generally sought for in physic, but most erroneously. There are no diseases you are subject to, not more under the controll of medicine, yet none more easily prevented and relieved by the exercise of common sense, in attention to habits.

Like all animals breathing much air and eating freely, women were made for exertion, their fluids for constant circulation. Each part must expend by exertion so much of its irritability; or disease will appear. Among the Indians and labouring class of women, there are but few if any cases of this disease. This alone should be sufficient to induce all subject to these complaints to seek relief in imitating the diet, exercise, and habits, of those who live agreeably to nature.

EXCESSIVE MENSTRUATION.

The first variety mentioned of the diseases of menstruation, was excessive discharge. This is usually greatest in most robust women, of indolent habits. In some it is profuse at once, in others it continues for several days reducing the system greatly, to extreme weakness. In this disease there is too great determination of blood to the womb, too much action in its vessels. The remedy is the dictate of common sense, equalise the action. This is to be done in persons very full of blood, to be determined by the pulse, or the feverish state of the system, by blood letting, by purging with salts, oil, or magnesia; and by

exciting action in other parts of the body. During the discharge, the patient should keep cool in bed, the hips a little elevated; abundance of cool fresh air to be admitted in her apartment. A vomit of ten or twelve grains of ipecacuanha, or a grain of tartar emetic, may be given every half hour, until the stomach is fully excited. When the discharge of blood is profuse, there should not be the least hesitation in introducing up the the birth place, cold water; by injecting it with a syringe or any common squirt, or by pushing up wet cloths. Sitting in a tub of cold water will often answer; an injection of sugar of lead water (a tea spoonful of lead to a pint of water) is a more certain remedy, but it should not be tried till the other prescriptions fail. In moderate cases wet cloths from cold water, or ice in a bag, applied to the abdomen, will afford relief. When the blood flows in an alarming quantity, it is by all means necessary to prevent its passage, by stuffing cloths up the birth place. Bleeding from the arm, the patient sitting up to favour fainting, should always be done, if the patient be not already too much reduced. Two grains of sugar of lead, with a quarter of a grain, or not, of opium, may be administered every two hours, until the discharge of blood is reduced. After this a purge should be given to carry off any remains of the medicine in the bowels. In common cases simply purging, keeping cool on a sofa, avoiding all stimulating diet or drinks, is all that is requisite during the discharge.

But the great object is to prevent returns of this excessive discharge. The only effectual means for prevention will be found in attention to the general health, as pointed out on the subject of the skin. In addition I would urge every woman subject to it, to revolutionize her habits, to spend her time between the discharges very different from

formerly, taking different exercise, diet and drink; particularly exciting a powerful action on her skin by frictions, by coarse applications, by cold and salt bath, and by blisters. About the time for the return, she should lose blood, particularly if of a full habit of body. She should devote unusual attention to her daily evacuations from the bowels, sitting daily in cold water, and to relieving her mouth from the irritation of rotten teeth. It has been suggested by a respectable physician, to cup the breasts, with a view to excite such a determination to them as would divert from the womb.

But I have no hesitation in recommending, as of far superior importance, the excitement of the breasts to the secretion of milk. The means of doing this will be particularly explained when on the subject of barrenness, to which I refer. The discharge being excited, I would advise it to be continued daily for two or three months, and in all probability it will relieve the determination to the womb, causing its excessive bleedings at least the more certainly, if aided by attention to the first advice.

OBSTRUCTED MENSTRUATION.

Unmarried women are most subject to this disease. The variations of it are from total to partial suppression; attended with little or great pain, and often marked by affections in the other parts of the system, from sympathy, analagous to those characterizing the pregnant state.

When menstruation first takes place, it is usually attended with pain, head-ache, and feverish symptoms. These generally go off without requiring any particular treatment. But when they are considerable, or the person delicate, it is best to favour the evacuation, by sitting

in a tub of warm water; this may be continued for hours when the pain or irritation is great. Dipping the feet in as hot water as can be endured, or in strong lye, or lime water, as is done for curing whitlow, or inflammation of the finger, will prove of service. It is not designed for the purpose of exciting perspiration, but to produce a scorching, or sense of burning, which will increase the determination to the lower parts. When the pains of the patient are considerable, blood should be taken from the arm, and sweet oil be applied all around the belly and small of the back.

More serious attention is necessary in cases where the discharge is suppressed after it has taken place. Strong passions of the mind, and exposure to cold during the menstrual period, frequently check the evacuation, which is followed by fever, by inflammation of the womb, and its attendant symptoms, pains in the neighbourhood, sick stomach, head-ache, and general appearances of fever. In every such case, it is proper that the patient should immediately sit in a tub of hot water, go to bed, take a purgative, and lose a little blood.

When the evacuation is obstructed for a length of time, more serious disorders ensue; "indigestion, sickness, variable appetite, heart-burn, distension of bowels, headache, palpitations, and many hysterical symptoms. Sometimes the face becomes pale, the eyes sunk, the bowels costive, pulse contracted and irregular, tongue foul, feet swelled, belly tumid, appetite diminished, craving of chalk, or indigestible food, the sleep interrupted."

In order to bring on a return of the menses, it is of the greatest importance to attend to the time when they should take place, as then the greatest efforts are to be made. The patient should have a small blister applied about a

day or two before the time, between the fundament and birth-place, called perineum. A purgative should at the same time be given, of four or five grains of aloes; to be repeated twice or three times. The next advice to be observed is, to sit in a tub of as hot water as can be endured, suddenly getting in and out of it. In a greater degree the feet should be scalded. Sometimes blisters applied to the ankles for three or four hours to redden the skin, have afforded relief; as also to the lower part of the belly, or to the small of the back.

If these remedies do not succeed, it is proper, in addition to their use, to inject in the vagina a mixture of strong brandy and water, as hot as can be borne, or of any thing else that will slightly irritate and inflame the parts, such as vinegar, wine, strong brine, and the like. The more the patient at the expected time moves about, by walking, riding, or jumping, the better. Electricity, used by drawing sparks from the thighs and neighbourhood, has been stated to be serviceable in many cases. Ligatures or bandages tied around the thighs, so as to compress the veins and not the arteries, a day or two previous, is also a remedy well worthy of trial; they are only to be continued an hour or two at a time, till the blood collecting in the legs, they are to be removed. The momentary distension produced, tends to excite a new and increased action in the lower parts, and thereby relieves the disease of the womb.

It is often of service to lose a little blood, if the general health be good; also when there is reason to believe the least fever exists. The change produced in the constitution by this evacuation, tends to favour the return of the womb to its natural action.

In guarding against this complaint, the health of the constitution is to be kept in view. I refer you to what

was recommended for the health of the skin. And I will only add, that you should be more cautious in avoiding irregularities, in taking exercise in open air, on foot, or on horseback, in having your skin well rubbed with a coarse brush every night, in evacuating your bowels every day, in having your decayed teeth extracted, lastly, in using the salt bath every morning, until within a few days of the expected return.

PERIOD OF CESSATION OF MENSES.

This is with most women a very critical time, and deserving of more attention than is generally paid to it. During all changes in the constitution, diseases are most apt to creep in; and never more so than at the revolution taking place in the womb at this period of life. As stated in the history of this evacuation, it disappears from the forty-fourth to the fiftieth year, preceded by varying irregularities in its appearance and symptoms.

Medicine can afford no relief; yet there is no affection so perfectly under the controul of management. It is the dictates of common sense, not the effect of doses, that are to be regarded. You know that this discharge for thirty years has been attended with considerable action and irritation in the womb, and great determination of blood to the part affording the secretion. The important object, then, on the cessation, must be to accustom the system gradually to the loss of irritation, and discontinuance of secretion. This is to be done by exciting temporary irritations in other parts, and by exhausting in exercise the superfluous quantity of blood, and by abstinence.

The means for the prevention and the cure of the affections arising at this period are the same. There should be an unusual action kept up on the skin, by the roughest rubbing of it daily. During half of every day, very coarse flannel, or coarse oznaburgs, should be worn next the skin; by wearing it longer, the skin becomes so familiarized to it, that no effect is produced. A pair of drawers, and waistcoat for the body, is the best mode of applying this irritating dress. Of the utmost importance is exercise in open air, riding, walking, and throwing the arms around the body, as is sometimes done to warm the hands, or cutting a little wood, or any exercise like it. The diet at this time should be lessened for several months. Purges of salts or oils, not aloes or jalap, or any gum, should be taken to evacuate the system; and it is proper occasionally to lose a little blood, especially among the robust. It is of the utmost importance to keep the birth-place perfectly clean, as the retained secretions irritate and excite diseased action in the womb. Above all, keep the bowels daily open, and whenever irritation or pain is felt, try the general warm bath, or at least sit in a tub of warm water, and until the pain goes off remain quiet. When there appears to be considerable disease in the womb, to be judged by pains in it, and around the back, and by the sympathy of other parts with it, as pains in the stomach, head and breast, it is proper to apply a blister plaster between the shoulders. In milder cases, the application of this plaster two or three hours, to redden the skin without blistering it, will do much good. The injection of warm water up the birth-place, will also be of considerable service, as also injecting it up the bowels. If the inflammation of the womb be considerable, it will be proper to vary the injection, to substitute cold water and a solution of lead (a tea spoonful to the pint) for the vagina. A large blister over the belly, to be dressed with mild sweet oil, will

greatly assist in diverting the action from the internal parts.

I wish to impress you strongly, that you are not to seek relief from opiates, so generally and improperly taken. They add to the disorder, by stimulating the system, already too inflammatory—sometimes most inflammatory when the pulse is low. The warm bath continued, bloodletting, keeping the body quiet and cool, afford the only safe anodynes in these cases.

By attending to these general directions, I can safely promise you, as the result, relief from present pain, and from a distressing succession of future complaints. No lady need apprehend cancerous womb or breasts, who will give a reasonable compliance to what I have urged; nor indeed will they have any of the affections occurring at this revolution in the system.

FLUOR ALBUS OR WHITES.

This is an increased secretion from the glands lining the vagina and womb, and it is an affection so local, that the constitution is seldom affected by it. The qualities of the discharge vary considerably. "In the mildest form it is slimy, resembling the white of an egg, having very little colour or smell. In the next degree, it is of a yellowish colour, but the colour not very deep, and the discharge not offensive. In a greater degree of disease, the colour is inclined to green, and the discharge is slightly offensive, and somewhat irritating. In the worst form, it resembles purulent matter, is ill smelled, and frequently mixed with blood.

"The simplest and slightest kind is not attended with pain in the back; the general health not much affected;

the strength scarcely diminished, though the back is rather weaker. The menstrual discharge is not interrupted, or irregular. In the next degree, the back is constantly weak, and after any exertion aches considerably; the power of digestion is diminished, and the bowels are generally costive, the menses continuing pretty regular. Sometimes there is a feeling of heat and itching about the lips of the vagina. In a greater degree of this complaint, the back is constantly painful, and very weak, and there is a feeling of much weight or relaxation about the lower part of the belly and top of the thighs. The menstrual discharge is either obstructed, or rendered irregular or profuse. The stomach is much impaired in its vigour, the bowels costive and flatulent; there is want of appetite, heart-burn, the face pale and unhealthy, palpitation, hysterical appearances; and the constitution seems altogether to be very much debilitated. This state is always productive of barrenness.

"The quantity of this discharge is as variable as the quality; in some cases very little, in others very profuse; in some continuing uniform, in others it increases or diminishes, or may altogether disappear for a day or two, or for a longer period. While the menses continue, the discharge of this disease often increases before and after the monthly period: sometimes when the menses are obstructed, it is greatly increased, attended with additional pain in the back: when the discharge comes from the womb alone, and not from the birth-place, it is sometimes interrupted for a day previous to menstruation; and if the patient conceive, it immediately stops. On the other hand, the discharge from the passage alone is often increased during pregnancy; and in some instances, takes place only at that time.

"This disease may arise from many causes, but par-

ticularly from those impairing the power of the womb itself; as a severe labour, or miscarriage—particularly if the patient get up too soon, and mismanage herself, or from profuse menstruation, or much fatigue, or exposure to cold at the menstrual time, or at any time, in the same way as discharges are produced from the glands of the nose, or wind pipe, which we observe in colds."—Dr. Burns.

The treatment of this complaint depends on its degree; in slight degrees of it, washing two or three times a day in cold water is sufficient. It is best to inject the water into the passage to the womb. In all cases, great cleanliness should be observed, as the excretion remaining in the passage changes to an acrid, irritating state, and increases the secretion.

If the use of cold water do not suffice, it will be proper to use other articles that abate inflammation. The best is sugar of lead, about a tea spoonful to the pint of water, injected at least three times a day. The same quantity of white vitriol, in equal solution, is also esteemed of great efficacy. Lastly, four or five times the quantity of alum in the same quantity of water may be used. If the discharge be very offensive, a small spoonful of very finely powdered charcoal, may be introduced up the birth-place every night and morning, until it is corrected. Sometimes a small quantity of laudanum may be added to the solutions injected. Such treatment never fails to give present relief.

But it is of the greatest consequence to prevent returns of the discharge, by diverting the action of the blood vessels to some other part of the body. All the means pointed out for relieving profuse menstruation, must be pursued; they are to be applied in the one case as rigorously as in the other. The only additional direction I have to give, is, to apply a small blister, either between the birth-

place and fundament, (called perineum,) or a large one on the small of the back, or in front of the lower part of the belly; at the same time, more freely using the injections, to restrain the action of the vessels in the birth-place. I conclude, urging you to preserve the general health by the means pointed out before, especially by exciting action on the surface of your body; and take great care never to let any old acrid matter remain on the part, or in the bowels.

HYSTERIC FITS.

The following description of this disease by Dr. Denman, is as good as can be given. "In a well marked hysterical fit, a sense of pain or fulness is felt in the belly near the navel, or towards the left side. This gradually spreads, and a sensation is felt as if a ball passed upwards and stuck in the throat. The patient now usually falls down insensible, or convulsed, and seems to suffer much in breathing, sobbing violently, or uttering a kind of shriek. She is generally pale, and frequently apparently insensible during a great part of the fit; or seems to be in a faint: but when she recovers, she is not only conscious of having been ill, but also of many circumstances which occurred during the fit. After remaining for a considerable time in a state of muscular agitation, alternating with an appearance of fainting, the affection abates. She utters deep sighs, opens her eyes, and looks around her, as if surprised, and at length recovers both composure and sensibility, but remains for some time languid, and complains of head ache. This restoration is accompanied with eructation, and the discharge of a quantity of limpid urine. The duration of the fit, as well as the circumstances attending it, vary much. In some instances it lasts only a few minutes,

in others, for more than an hour. Sometimes there is great muscular agitation, or pretty strong convulsions; at other times, the fit resembles more a faint. In some instances, violent fits of laughing and crying alternate with each other, whilst in many cases these symptoms are entirely absent."

Most women are subject to some of the irregularities of this disease, as manifested by too acute sensibility. The time is about the period of menstruation, when their systems appear to have great irritability. The acrid secretion coming from the womb, tends to irritate the external parts and produce the disease: and it is also probable that it is always attended with some particular state of the womb itself.

They are most subject to it who lead a sedentary life, breathe foul air, and retain their excrement too long in the bowels. The acrid contents of the lower guts readily excite action in the adjoining womb, and produce disease. Next the adherence of the ordinary secretion of the glands about the birth-place, which, irritating the sensible parts, cannot fail to produce similar effects. Lastly, irregularities in eating and drinking. The disease once excited is very apt to become periodical, and appear without any exciting cause.

The prevention consists in guarding against the causes mentioned with the most earnest diligence. To sleep with the bed room door open, and to take moderate exercise out of doors daily, is indispensably necessary; or by all means, they should sit daily in a tub of cold water. The excitement of any sudden or strong passions should be carefully avoided, as also indulging any length of time in particular habits or whims. Travelling and salt bathing are of great service. When it is necessary to open the

bowels with medicine, it should be done with aloes, in preference to all other purges. Glysters are extremely advantageous. About the time the fit is expected, it is best always to take about five or six grains of aloes, as well as a glyster. Purging is extremely proper, as the contents of the bowels are always offensive in this disease. A dessert spoonful of prepared chalk, or as much charcoal in yeast, will tend to correct this offensiveness. The system of the person should be as much revolutionized, or changed, in order to destroy the habit of such returns of action, as possible. Bleeding in addition to the purging is proper. An emetic may be given with greatest advantage, before the expected time. The skin should be irritated by the roughest friction; the mind should be kept as mildly occupied as possible. This disease is most assuredly under the controul of such treatment, earnestly attended to, and its recurrence among those aware of the prevention, affords some grounds for reflection on their laziness and inattention.

The treatment when the fit comes on is very simple. Let the patient be placed in cool air, on the bed or floor, and turn and writhe, so long as they do not hurt themselves. This is to be prevented by holding them. Volatile salts, or any thing pungent, or offensive to smell, should be held to the nose. It is said, a Yankee Doctor, not having any thing at hand, once successfully applied his toes to the nose of his hysteric patient. The limbs should be rubbed with a stiff brush. The moment it can be done, pour down the throat, either twenty grains of ipecacuanha, or a solution of three grains of tartar emetic, or a table spoonful of antimonial wine. As soon as the vomiting commences, the fit generally ceases. After the operation of the vomit, you should give of aloes and asafoetida,

of each four grains, to be repeated on any symptoms of the return of the disorder. If none be at hand, give thirty or forty drops of laudanum and any purgative. If laudanum be not at hand, use a glass of brandy; but beware of its leading to dram drinking, as has often been the unhappy case.

It has been supposed that this disease arises from a peculiar state of the womb. Our means of operating on the womb are but few; we have none more powerful than through the breasts. I would therefore press on those subject to periodical returns of hysteriad, which do not yield to the treatment before suggested, to excite the breasts to their healthy action, the secretion of milk so as to influence the womb. The means of doing this will be stated on the subject of barrenness, to which I refer.

INDIGESTION.

The last complaint of which I shall make a few observations, is one of which every one has occasional attacks in lesser degrees. The difficulties of digestion are complained of as universally as the subject of digestible food is discussed.

Indigestion of greatest degrees, is sometimes marked by "sickness of stomach, vomiting, and excessive flatulence: also, heart-burn, hiccup, water brash, acidity, headache, lassitude, unhealthy complexion, bad sleep, high coloured urine, &c. Some modifications of this disease are attended with vomiting of blood or of bile; severe pain in the stomach, or are connected with uneasiness in the right side; bloody coloured urine, pain in the top of the shoulder, yellow complexion, repeated fits of vomiting, &c.:" in short, by all the symptoms of diseased liver, of which it is

sometimes a symptom. When the liver is affected, the best medical men should be consulted, and should superintend the salivation of the patient, which affords the only chance of cure.

Lesser degrees of indigestion arise from sedentary life, occur to those of costive habits, too lazy to take the trouble to evacuate the bowels every day. Persons who eat irregularly large quantities of articles they are unaccustomed to, drink immoderate stimulants, or eat them as in spices, are subject to serious degrees of this disease; as also those who have rotten teeth.

The cure will, in most cases, be perfected by avoiding the causes. When it is not, it will be best to consult a physician. Costiveness and a sedentary life are easily to be avoided. The general health is particularly to be promoted by rubbing the skin with the brush, and wearing coarse flannels in contact, and by the salt bath. Lastly, but not of least consequence, is the diet.

To determine what is the best article of diet, what the most healthy food, although talked of by every body, is a most difficult task. Indeed, the most extensive observation leads to the conclusion, that there is no diet, healthy or unhealthy, but that all depends on our habit of using the particular kind. It is habit that familiarizes the stomach to the digestion of each article; and it is inattention to this habit, indulging in sudden changes from one to another diet, that has induced so many persons to pronounce so many articles unhealthy.

As soon as there is the least reason for believing the stomach to be disordered in its digestion, it becomes the patient to observe the greatest regularity in eating, as to time and kind. The most simple food, and that of which most has been eaten during life, should be selected. When

it is necessary to change, be sure to change most gradually, taking at first but a mouthful daily for several days previous to changing altogether. The propriety of this is confirmed by the sickness so generally produced in spring seasons, when the food is changed. Nothing more shows this than the nausea so generally felt after eating fish the first time; and similar are the effects produced by eating large quantities of any new fruit. Although we may not be sensible of it, in our common changes, nevertheless, very considerable effects are produced in the stomach by all variations in diet. Instead, therefore, of deceiving you, as some physicians often do, by advising you to confine yourselves to veal, fish, pork, or fowl, that they may gain reputation by the fancied skill displayed in the selections, I state the truth, that the good effects arise from the confinement; and that, in all human probability, one kind of meat, one article, is precisely as good as another. To this I will add, that rest after eating greatly facilitates digestion. This is unquestionably proved by an experiment often repeated. To two similar healthy animals equal quantities of food have been given; the one kept moving, the other perfectly quiet, for a few hours. On killing and opening their stomachs, the food in the one at rest is always found digested, the other not at all. To eat but few articles regularly, to change the kind very gradually, to keep quiet for three or four hours after eating, is the sum of all that can properly be said on the subject of healthy or unhealthy diet.

When the eructations from the stomach are very acid, chalk and magnesia, or a quarter of a tea spoonful of potash, or of soda mixed in milk or water, may be taken two or three times a day. When the stomach has been destroyed by the operation of strong stimulants, as spices, drams, opium, or strong tea, it is necessary to substitute, in lesser degrees, other stimulants to promote digestion, different from those which have been freely used. The quantities or proportion must be regulated by previous habits, and should, with those who desire to be restored to health, be gradually discontinued altogether.

LETTER V.

CONTENTS. Description of organs of generation—their diseases—child's head—suppression of urine, and drawing off with catheter—falling backwards—downwards—turning inside out of the womb—dropsy of the female testicle—venereal disease.

I HAVE now to give you a description of the parts concerned in generation. It is not my design to attempt making more than such a general statement as will enable you to think and speak with tolerable accuracy of the parts. I have witnessed so many groundless fears, so many dreadful forebodings on the slightest appearance of disease in this region, that I feel confident you will be greatly benefited by a more correct knowledge of them. To make you certain that they are like all other parts of the body; have nothing of a wonderful nature about them, and require for the treatment of their diseases simply the exertion of sound sense, will be of advantage.

In describing them, it is customary to do it under the divisions of hard parts, meaning the bones, and soft parts, including the external and internal.

The bones immediately concerned in generation are those forming the circle around our bodies, about the hips, collectively called the pelvis, a name you may readily remember. This pelvis is formed by the union of separate bones, of which you should remember particularly the end of the back-bone, called sacrum. This bone turning

round as it were our rumps, forms a considerable curve and hollow, as you will perceive by reference to figure the second, representing it split down and a side view. The end of this sacred bone, or sacrum, is called os coccygis; which is so joined as to move a little backwards and outwards at births; particularly among those who marry late it sometimes makes a noise in moving. The sacrum is connected to the hip bone on each side (called os ilium,) and these hip bones unite to a bone on each side towards our front, called os pubis. Each os pubis unites in the centre to each other, and forms what is called the symphisis, or union of the pubes. This union has attracted more attention than any other of the pelvis, because it is sometimes defective after child-bearing; and sometimes it has been divided to facilitate the passage of the child's head; a practice which experience has proved to be improper. In women of small pelvis, where these parts have been strained at birth, there is great weakness; in some cases impossibility of walking. There is no remedy for this misfortune but rest, and a tight bandage around the hips, so as to compress them together.

All the hard names you have to remember on the subject of these bones are, the pelvis, meaning the bones around our hips collectively; then the sacrum, or end of the back-bone, with its end called os coccygis; then the pubes in front. With the os ilium, or hip-bone; and the os ischium, or haunch-bone, connected to it, on which we rest while sitting, you need not trouble your memories.

The female pelvis is larger than that of males. It has been compared to a basin, without bottom, one side much narrower than the other. In front it is much more shallow than at the back, which, as before observed, is formed by the back-bone, called at this end os sacrum.

The pelvis is considerably wider from hip to hip, above, that is, at its upper edge towards our head, than below. This upper part is called its upper brim, and measures from side to side, or hip to hip, from four to near six inches, in those of the largest size; from front to back it measures from about three inches to near five. But at the bottom of the pelvis, when the child's head passes out from the bones called the lower brim, these dimensions change, and are reversed; so that the widest part of the lower brim is from front to back, instead of from side to side, as at the upper brim. Understanding this, and knowing the dimensions of a child's head, narrowest from ear to ear, and knowing that nature always performs her business in the wisest manner, you could at once tell how a child's head passes through this opening at natural births.

After reading the above, you may impress all on your mind that is necessary to be known on the subject; particularly if you will refer to the first figure, showing a well formed pelvis. This does not give you an accurate idea of the back bone or sacrum, and os coccygis, which is properly represented in figure the second. The narrowness of the front of the pelvis, where the pubes unite, may be observed in each of these figures. These are figures of a well formed pelvis. But the pelvis is subject to deformities as well as irregularities in its dimensions. These deformities are common in manufacturing countries, as in England and France; but very rare in those countries where the people are not cramped up, as in the United States. The chief deformity is the projection forwards of the back-bone, so as to come nearer the pubes in front, and obstruct the passage of the child. Parents ought always to avoid giving their daughters blows on the lower part of the back, as they might produce the injury

of causing the spine to bend forwards. The extent of the obstruction produced by the sacrum on a living subject is difficult to be ascertained; but an idea of sufficient accuracy for practical purposes may be formed, by pushing the fore finger up the birth-place, in front close to the pubes, then moving it backwards to the projecting part of the sacrum. The distance the finger goes before it reaches the back part or sacrum, will give you the capacity of the pelvis. The actual distance the finger moves must be conjectured.

In order to end the dry subject of bones, I will mention those of the child's head proper to be attended to. From figures the third and fourth you may form ideas of the skull of an infant. You should observe and remember, that it is longest from the front to the back part, which part is called the crown of the head! so that, when the chin rests on the neck, as at birth, it forms a kind of cone. From ear to ear the head is generally not more than three inches; and the head of course adapting itself to the favourable shape of the pelvis, would pass out its ears to the front and back bones of the mother, at the beginning or upper brim, and in descending would twist one quarter round, and come out with the ears towards the hips of the mother, as from side to side of the lower brim of the pelvis, it is narrowest. It is necessary to observe and remember the seams marked on the figure of the scull, which correspond to divisions of the bones called sutures. You should remark that the sutures run from front backwards, and from the sides upwards, and that at their meeting towards the forehead an opening is formed, called the front fontanelle, which is of nearly square shape, distinguishable by its four corners, or angles; at the meeting towards the back or crown of the head, another opening exists, called the back fontanelle, of nearly three

sides, or triangular shape. It is most necessary in tedious labours, when the head presents, to be able to distinguish which of these openings is at the mouth of the womb. The bones forming the child's head, which you ought to remember, are, the bone of the forehead, called frontal bone, and the bone opposite, backwards, called the occiput. The temple bones, at each side of the ears, and the bones forming the remaining sides of the head, called parietal bones, are not necessary for you to commit to memory. It is the crown bone, or occiput, that presents in the best cases of births, and consequently the lesser, or back fontanelle, is always felt, with its triangular or three sided edges.

This formation of the head of the infant, is one of the master works of nature. The edges of the bones are very soft, of a somewhat gristly nature, readily yielding to compression; the edge of one side passing over that of the other, so as to favour the variation of the shape of the skull, to suit the opening it has to pass. It is worthy of remembrance, that so singularly pliable is the infantile head, so strong are the expelling powers of the womb, that in cases of deformity of pelvis, the head has passed through an orifice not exceeding two inches from front to back.

After taking into view the formation of the child's head, and the formation of the pelvis, it must readily appear, as nature always operates wisely, that the one ought to pass in the manner best suited to the form of the other. Accordingly, in natural cases, it is precisely so. The head enters the upper part of the pelvis, called the upper brim, with the ears to the front and back bone of the mother, then passing along, it twists one quarter around, so that in making its escape, at the lower brim, or edge of the pelvis, the ears are from hip to hip; the face, of course, towards the backs

No female of reasonable mind, seeing such display of provision for the birth of the young, ought to indulge in fears of her delivery; probably more destructive in their tendency than the greatest irregularities of nature.

The parts next to be described, are the soft parts, as exhibited externally. The front view exhibits to the eye the fatty elevation on the pubes, called the mons veneris, with its crown of hair. This mass divides, one half running down each side, forming something like lips, and called the labiæ; at the bottom these lips unite again, and exhibit a kind of sheet, called perineum, about an inch long, and then disappears about the fundament, or anus.

Upon opening these labiæ or lips, the first conspicuous part above is a small elevation, or rising, called clitoris, the seat of pleasure in the sexual intercourse, called copulation. In some it is of very small size, scarcely perceptible, in other cases very conspicuous. There are numerous glands around this, secreting a cheesy, odorous substance, which, unless washed off, irritates the clitoris, and excites venereal desires, as before stated. Directly under this clitoris, is a small orifice, leading to the bladder, through which the urine passes. The canal leading to the bladder is called the urethra.

Beneath the urethra, in some virgins, is seen a thin membrane, called hymen. In the first sexual connexion, it is rent asunder, and appears in ragged edges each side. Some virgins have had this membrane so compactly formed, as to prevent the passage of the menses, so that they have collected in the womb, and produced a distension like that of pregnancy. The remedy is to make a small puncture with a lancet, and allow the confined matter to pass. In many, this membrane does not exist. Where it has been destroyed by copulation, and the desire existed to impose the sub-

ject on some man for a virgin, the opposite sides have been slightly scarified, and being kept in close contact by the forceps, or any other means of compression, they have united, so that the parts have quite the virgin appearance and difficulty in entrance.

The hymen being destroyed, and the parts opened, there is the entrance to the womb, called vagina, or birth-place, which in virgins is narrower than in those who are not so.

The exterior parts, particularly the labiæ, or lips, are very subject to inflammations and swellings; to great itching, and to ulceration or sores. The regular application of cold water, as before remarked, prevents such disease. When itching or inflammation exists, the application of iced or cold water, as also a solution of sugar of lead, will afford relief. Fresh sweet oil is also of service. In cases of ulcerations or sores, the most simple applications are best. Mild mercurial ointment, mild fat, and oil and bees' wax melted together, are proper. The parts should be treated just as other parts, when similarly affected.

Having thus given you a brief sketch of the exterior parts of generation, sufficient, if remembered, for all practical purposes, I proceed to the explanation of the interior parts.

As before remarked, the first orifice is that of the urethra, for the exit of the urine. Around its edge it has a small or slight elevation, which it is proper to remember as a guide for an operation which will presently be mentioned. This orifice of course conducts to the bladder; and it is this channel which is called the urethra. It is wider than the largest goose quill, and from two to three inches in length.

This urethra, or canal to the bladder, is subject to considerable disease; sometimes to obstruction, preventing

the discharge of the urine. There is no complaint to which females are subject more manageable among themselves, and consequently which they ought to attend to with more earnestness; yet the knowledge necessary is of such easy acquisition, the performances so simple, that an earnest attention is not necessary. Nevertheless, this little knowledge, this little ability to perform, has been so neglected, that not only innumerable females have had to exhibit themselves to doctors, but many of them have actually expired, from want of some one to draw off their urine, by means of a little tube called "a catheter," corresponding nearly in shape to a goose quill, which has often proved a convenient substitute. In my undisguised opinion, it is a disgrace to the sex, that a man should have been called upon to perform an operation so indelicate, and so simple in its nature—that while a child in its senses, of six years of age, blushed in submitting to the operation, it would declare its ability to perform it on another.

And what is the operation of introducing the catheter, to evacuate the urine? The bladder containing the urine, is immediately under the bones in front, called the pubes; the canal to it is direct, not three inches long. The instrument, the catheter, as a quill, is adapted to the size, and the woman laying on her back, finding the entrance, and pushing it backwards and upwards, pushing it gently, in the direction where least resistance is made, can readily introduce it in herself for the flow of the urine. If there be too much sickness for a woman to perform the operation on herself, her associate, her nurse, her servant can do it. The catheter is to be greased with the mildest oil; the patient laying on her back, it is pushed most slowly and gently into the bladder: it is to be held between two fingers, and may occasionally be rolled around. The ure-

thra makes some resistance, particularly at its entrance in the bladder, which is to be overcome with patience and gentleness, not violence. In figure the eighth, you see the introduction of the catheter. When pregnancy exists, and the bladder is thrown up in the belly, as soon as the catheter is introduced, it should be held downwards, as in catheter No. 1. In catheter No. 2, it is supposed that the bladder is not so elevated, and it is pushed backwards instead of upwards.

In cases of pregnancy, the urethra is compressed by the head of the child, and the best catheter is an elastic or compressible one, which will yield, or adapt itself to the part it has to enter. You should remember, if it be impossible for you to procure a catheter, and consequently have to use a goose quill for a catheter, it should be so tied or connected, as to prevent its entire entrance in the bladder, where it has sometimes passed, and exposed the patient to the necessity of a dreadful operation for its extraction. The common catheters have a handle, to prevent this accident. I suppose it is scarcely necessary to mention, that, on introducing the catheter, you should have a pot or basin, to let the urine flow into. Where it is to be introduced, and the patient cannot discharge the water afterwards without aid, it should be introduced twice or three times every day.

Dr. Bard thus writes on this subject. "Introducing the catheter, in the female, when the midwife is properly acquainted with the situation of the orifice, and the direction of the urinary canal, is an operation of little more difficulty than administering a clyster; except where certain obstacles occur, which are to be overcome, more by patience and gently repeated attempts, than by any remarkable skill. From motives of delicacy alone, this easy operation ought

to be in the hands of women; but what is of much more consequence is, that if a man is to be sent for every time it may be necessary to perform it, it will generally be neglected too long, particularly in the country; to the very great injury, and in some instances, danger of the patient. The orifice of the urethra or urinary canal, is situated under the arch of the pubes or share bones, and the canal, making a slight curve, ascends very little, and enters the bladder almost immediately behind it; it is not above one inch and a half long, so large as to admit a catheter of the size of a goose-quill, and so little curved that a straight instrument is by some preferred. Having discovered the orifice, the operator, standing or sitting on the right side of the patient, and holding the instrument in the right hand, with the hollow of the curve towards the patient, is to introduce it; directing the point at first a little downwards and backwards, when gently depressing the hand, raise the point a little upwards and forwards: it will almost immediately enter the bladder, and the urine will flow from its extremity. If, however, some little difficulty should occur, patience, and gently moving the hand from side to side, or upwards and downwards, will overcome it with very little or no force; and with little pain to the patient. At any rate, force is never to be used; it is better to desist, and make a second or a third attempt: for whenever any difficulty presents, it is owing to circumstances not to be overcome by violence, which can never do good, but may do infinite mischief. In some cases it is best to put the instrument, when introduced into the orifice, into the hand of the patient; who, directed by her own feelings, will sometimes succeed more easily than any other person: a caution, however, necessary to be observed respecting the use of the catheter, is not to introduce it unnecessarily;

or before such remedies as warm bathing, fomentations, a clyster, soft mucilaginous drink, have been tried: because, when it has once been introduced, it is frequently found necessary to repeat the operation, from the increased senbility it induces on the urethra and neck of the bladder."

It is proper in this place to remind you, that there are many temporary suppressions of urine, not requiring the introduction of the catheter. A purge of salts or cream of tartar, will generally relieve effectually, as also sitting in the warm bath. Such is the habit of urinating at the time of evacuating the bowels, that it is seldom the bowels are opened in these temporary suppressions, without relief to the bladder. Your rule for introducing the catheter, should be generally when the bladder is painful, or when it may be felt just over the pubes or front bones; and when, by introducing the finger up the birth-place, you feel the bladder enlarged. In many cases of fever, there is no secretion of urine for a day or two, sometimes longer: it is useless in these cases to indulge in the least fear or uneasiness.

From the application of blisters, there is sometimes great pain and difficulty in voiding the urine: the parts being considerably irritated. This generally wears off in a day or two; particularly if aided by a free use of flax-seed tea, or any mucilaginous drink, as gum arabic and water, or elm bark tea. The certain remedy for this complaint, is a clyster of half a pint of warm water, with fifty drops of laudanum. Generally a little starch may be blended with it. You ought not to use this injection in cases of high fever, unless the pain of the stranguary be very great. Before using it, I would always try sitting in a tub of warm water, and keeping a rag wet with a solution of sugar of lead over the parts inflamed.

The second internal part below the urinary canal, is called the vagina, or birth-place. At the age of puberty, and before copulation, it is from two and a half to three inches long, and rather more than an inch in width. Its internal surface is lined with glands which secrete considerable quantities of mucus, particularly during connection with the male, and when excited to action, as in the disease called *whites*.

The vagina, or birth-place, is subject, from its commencement at the edge of the labia or lips, to its termination at the mouth of the womb, to inflammation. Sometimes matter very much like that of sores is formed. The remedy is a free injection of cold water; in more violent cases, of lead water, or of white vitriol and water. Low living and purging always expedite the cure of such inflammations.

There have been some cases where the vagina has contracted, forming a stricture, impeding entrance. I knew a case of this kind, where the poor pregnant woman was left by her injudicious physician to have it enlarged by the connection with her husband. The consequence was, that the stricture increased till her delivery, when the resistance was such that she died. The remedy for this complaint is gradual distension; the gradual distension may be made by introducing any large body which will stretch the passage. The best article for this purpose, is a stick made tapering to a blunt point, as large as can enter; this is to be covered with waxed linen, made tight around it, and three or four times a day should be gently pushed up, so as to stretch the parts more and more every day. A piece of dry spunge dipped in melted wax, then pressed and pushed in the stricture, and allowed to enlarge by the moisture of the part, will be of great service. In cases

where the constriction increases, the stick for dilating it may be worn; a bandage around the parts will support and preserve it in place.

The birth-place, or vagina, receives into it the mouth of the womb, the edges or lips of which project forwards; so that they may be felt, before its connection with the vagina. It has been compared to the inverted finger of a glove. This projection of the womb into the birth-place should be understood by midwives, as it is from its feel that the existence of labour is certainly ascertained. This mouth of the womb is called, ridiculously enough, os internum, and os tincae; but you will better understand it, by calling it the mouth of the womb.

The womb is called the uterus; it is of the size of a common large pear; the largest part upwards towards the stomach. It is divided into neck, sides, and fundus. The small part, commencing at its mouth, is the neck, this disappears in its round sides; and lastly, the largest upper part, called the fundus; to which the after-birth is often attached.

The womb is a very fibrous mass of considerable thickness. It is the receiver of what forms the child. It is of such a nature, that it enlarges, and grows to the enormous size for containing the child and its appendages; nevertheless, always retaining the same thickness of its sides. It is by the contraction of these fibres that the contents are expelled. It receives large quantities of blood, and secretes the discharge called the menses.

The womb is suspended, from each side of the pelvis, by a membrane, which allows it to float about considerably. Attached to the two opposite sides of it is a small fleshy tube, extending near three inches, called the fallopian tubes. These tubes terminate in a ragged kind of edge. To each side of the pelvis is a small mass of the size of a large bean, called the ovariæ, or female testicles, as they supply the seed the woman yields at impregnation. They have little reservoirs, like small blisters, and at every conception one of these bursts, and gives up its contents, leaving something of a scar in its place. By cutting these out, as in the spaying of hogs, the animal is deprived of the power of conception. From these circumstances, it has been set. tled, that in successful copulation, these floating, moving fallopian tubes, all stimulated by the seed of the male, have their ragged edges attached to the ovaria, take up the contents of one of the little bladders, and carry it to the womb for its growth or development.

Behind the womb and vagina, and attached to the curve or hollow of the sacrum, or end of the back bone, is the receptacle of the excrement, called the rectum or strait gut. By reference to figure the sixth, you will perceive the relative situation of these parts better than can be explained by writing.

Having fully familiarized your mind to the relative situation of these parts, by the inspection of the figures, you will be better qualified to understand the nature of the affections of the womb. You observe that it is connected to your sides by a membrane at each side of the womb. Now this membrane is liable to extension, particularly

when an ignorant midwife is allowed by ignorant bystanders, to pull the after-birth away. This is called the falling down of the womb. Its mouth continues to sink through the birth-place, till it protrudes out, a most lamentable affliction, since the remedies are but partial. They consist in bathing the parts well in cold water, gently pushing back the womb, and putting up the birthplace a little, oval, oblong ball, called a pessary. This may be made of bees' wax, of sponge, silver, bone, or ivory, which you may get from the apothecaries, if you do not choose to make it yourselves. You push it up the vagina while lying on your back, and retain it there by a bandage around, as in wearing diapers. It may be taken out at night after laying down; but must be pushed up in the morning before rising. Cold water poured around the hips every morning, will tend to expedite the retraction or cure, which in some cases has been perfectly effected by perseverance in the use of the pessary, or long, round body, worn in the birth-place, to support the falling womb.

The next affection of the womb I wish you to understand, is what has been termed its inversion, or falling backwards, as represented in figure the seventh. This takes place in the early stages of pregnancy, when, after the enlargement of the womb, particularly on retaining the urine, sometimes from a blow, kick of a child's foot, and the like, above the pelvis, the bottom of the womb is thrown backwards over the strait gut, so that its mouth is turned upwards. This presses on the neck of the bladder, and, preventing the evacuation of urine, increases the derangement by consequent distension. The treatment for

this accident is very simple; be sure first to draw off the urine with a catheter; give a clyster to open the lower bowels; then let the woman rest on her feet and head, or elbows. In this situation, push the finger, well greased, up the fundament, and you will feel the ball formed by the womb, which you are to push upwards. You may also have a finger up the vagina, and it is scarcely possible, by gently raising the womb with each finger towards its natural place, that you can fail of success. On its restoration, the woman should be quiet for a week or two, and be cautious of exposure to the causes, particularly to void her urine very often. In some cases of this inversion, there is only a difficulty in discharging the urine; which, as the womb enlarges, increases. In every such case you must evacuate the urine, and resort immediately to the pushing back the womb, as directed. Dr. Denman remarks, that it is the middle class in society who are most subject to this complaint; the highest and lowest are not ashamed to walk out and evacuate their urine the moment they desire it. The middle class are so modest, so ashamed, at the suspicion they wish to urinate, that they sit, the bladder distending till it inverts or turns over the bottom of the There is no caution which a married woman ought to bear in mind more constantly, than that it is very injurious to retain her urine.

The last derangement of the womb I shall mention is one that very seldom occurs. It is when the inside of the womb is turned directly outwards, and protrudes out of the birth-place as a bag or bladder, immediately after a delivery. The cause of this is over straining at delivery, but mostly violence in pulling away the after-birth, for

which any midwife ought to be punished. The remedy is, to reduce the patient by blood-letting, if not previously enough reduced; to foment and bathe the womb, so as to reduce the inflammation, that it may be replaced. To do this, hold the mass grasped in one hand, with the fore-finger of the other push back the bottom, as if you wanted to push in a bladder, so as to be inside out; continue gently pushing till the inversion is effected, and then the whole with a finger may be pushed up the vagina, to its natural situation. A medical man ought to attend to the patient's health, while she carefully avoids sneezing, bearing down, and the like causes of relapse.

The next disease I shall mention of the internal parts of generation, is a dropsy of the ovaria, commencing with a small swelling in either side, gradually enlarging till the belly becomes immensely distended. The best treatment is to let it alone; as the melancholy truth has been discovered, that no cure can be effected by medicine. Sometimes it has been known to burst in the womb, discharging all its contents through it, so as to relieve the patient. Opening the side to evacuate the contents has seldom done service. All the useful that can be urged on this subject is, that as there are strong reasons for believing the complaint arises from blows or bruises about and above the groin and pubes; females should be careful to avoid them.

The womb, like every part of the body, is subject to inflammations. The treatment of these inflammations is pretty much the same as that of other parts. It is very remarkable how much the breasts, stomach, and brain, sympathize with the womb, when inflamed. The only prescription, in addition to the general evacuating remedies for inflammation, is to apply a lump of ice, or a cloth wet in cold water, for a few minutes, several times during the day, on the belly, just above the pubes.

VENEREAL DISEASE.

I shall conclude this letter, by giving some account of that loathsome disease called the venereal; which I think every mistress of a family ought to understand. There is scarcely a day in which some poor female servant does not suffer greatly from it; constantly labouring to conceal it, from the shame of exposure to physicians. Were they to know that they could readily be cured by one of their own sex, they would speedily apply for relief.

There are two kinds of venereal disease; one called the clap—the other the pox; very different in their natures, and requiring as different treatment.

CLAP.

The clap is called the gonorrhea. It is simply an inflammation from infectious, irritating matter, of the glands, lining the vagina or birth-place. It is a disease supposed to have been brought on solely by filthy habits. When the disease exists, there is an increased discharge from the birth-place, of purulent looking matter; sometimes of various shades in colour. There is pain in making water, and often great sensibility of the parts. The cure for this disease, is the cure for common inflammation. Confine the patient to a low diet, give purges of salts, and use those

washes which lessen inflammation. I have known this complaint to be perfectly cured, by washing every hour in the coldesticed water. But the best wash is, twenty grains of sugar of lead, or of white vitriol in a pint of water, squirted up the birth-place every two hours. The best squirt for the injection is a common one, with a large blunt point; the wash to be thrown up with considerable force. The common squirts, or female syringes, will answer the purpose. By perseverance in the use of these for ten or fifteen days, at farthest twenty days, taking extreme care to keep the parts perfectly clean, a cure may be certainly effected. The rule for discontinuing the wash, is the cessation of the inflammation and discharge. I have to add, that physicians of great respectability have very warmly recommended, for every patient affected with this disease, to take, in addition to the above prescriptions, thirty or forty drops of the balsam of copaiva, on a lump of sugar, three or four times a day. Its efficacy is so well established, that I would recommend its universal use.

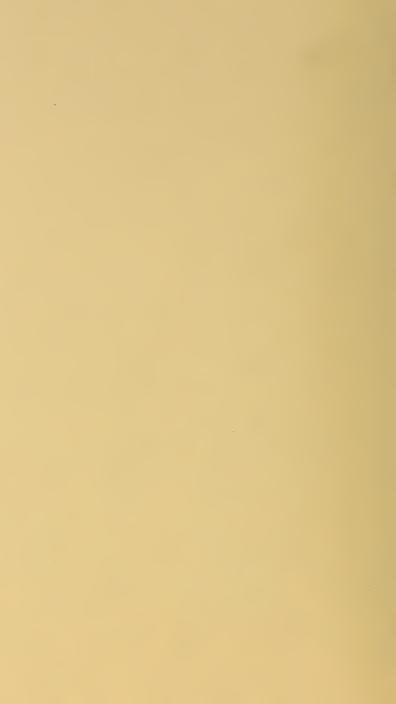
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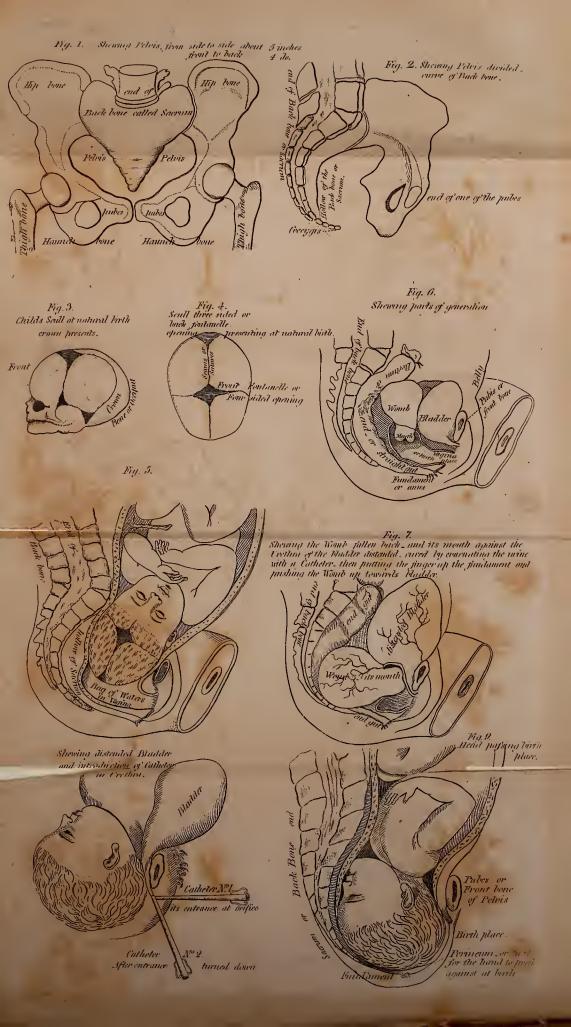
The second venereal disease, which has slain its thousands and tens of thousands, is very different from the clap; and is called the pox, or siphilis. In these cases the constitution is affected; and to it the remedies are to be applied. About the edges of the lips of the birth-place, there appear small sores, called chancres. Their characteristic is, that they are always hollow, and appear as if cating inwards. Sometime after the appearance of these chancres, from five, to forty or fifty days, there comes a tumour in the groin, like what is commonly called a waxen-kernel. The professional name for these tumours is bubo.

For the cure of this disease, physicians rely upon mercury, from beginning to end. The sooner it is commenced with the better. On the chancres or sores, about the lips of the part, calomel should be sprinkled twice a day, after washing them with soap and water. Half a grain of calomel should be swallowed three times a day, until the mouth becomes sore; when the quantity should be reduced one third. The great secret in salivating, to cure this complaint, is to keep up the action of the mercury, without producing great discharges from the mouth. This is done by the patients never lying down when it can be avoided: also by guarding against exposures to wet and cold. The mercurial action should be kept up from six to twelve weeks; or about one week after the sores heal up. When the salivation is excessive, it should be remembered, that the cure is not to be effected by sulphur, or by any medicine: not by the innumerable washes for the mouth. The certain means for curing, are keeping the patient up; never having the head down when it can be avoided; and keeping the body in constant exercise.

This disease is cured by many in preference, especially when the calomel affects the bowels, by rubbing mercurial ointment every night over the arms and thighs, until the mercurial action is produced as by the calomel. Sometimes it is necessary to apply this ointment to the sores. A little red precipitate sprinkled on them for a few days, often expedites the cure. It is also proper to apply lunar caustic to the edges of the sores, whenever they appear hard. They should be touched with it in the manner used for warts. For the bubo, before it has bursted, a powerful vomit, also a large blister plaster put over it and the

Nig. 1. Showing Petris, from side to side about 5 inches, front to back 4 do. Fig. 2. Shewing Petris divided ...







groin, has frequently dispersed it. When they burst they are very apt to become dangerous, and in that case a physician ought always to direct the treatment.

It is not to be denied, that there are some cases of this disease extremely difficult; nay, impossible to be cured. The matter acts upon the body as a poison, baffling the prescriptions of the ablest physicians. I would enjoin, whenever the case becomes obstinate, to call in a physician, for the treatment of the first symptoms as well as the secondary. The secondary symptoms never fail to make their appearance, when the salivation has not been continued sufficiently long to cure the constitution. These are pains on going to bed, in the muscles and in the bones, enlargement of the bones, sore throat, destruction of nose, &c.



LETTER VI.

CONTENTS. The womb in pregnancy—history of its enlargement—symptoms, and sign of conception—conduct during pregnancy—diseases attendant—inflammation of bowels—sickness and vomiting—heart-burn—colic—fainting—swelled legs—flooding—abortion—cure of barrenness.

From the description of the organs of generation, I proceed to explain their functions. Every woman in child-bearing becomes of more interest; another is depending upon her, and none but the most indifferent observers fail to feel a deep solicitude for their prosperous delivery.

At the sexual intercourse between man and woman, when the circumstances have been favourable for conception, the seed of the male is supposed to enter the womb of the female, and uniting with the seed of the woman, comes down through the tubes called the fallopian, and forms the commencement of our bodies. At the same time is formed what is necessary for the growth; that is, a coat or covering to include the whole, and lining the womb, called the membranes; also, a fleshy substance, almost like the liver, called after-birth, or placenta. This after-birth receives and prepares the blood supplied by the womb for the child; there is a tube passing from the after-birth to the

navel of the child, called the umbilical or navel cord; the tube is for the purpose of the circulation of blood between the mother and child; lastly, is also formed a liquid, called among women, "the waters," resembling in its nature the white of eggs, a fluid in which the child moves. Thus the contents of a pregnant womb, formed in miniature at conception, are the child, the waters, the membranes holding them, the navel cord, and the after-birth. The natural history of their growth is thus stated by count Buffon. "Immediately after the mixture of the seminal fluids, it is probable the whole materials of generation exist in the womb, under the form of a small globe. This globe is formed by a delicate membrane, which contains a limpid liquor, very like the white of an egg. In this fluid may be seen some small fibres, which are the first rudiments of the young. Upon the surface of this globe there is a net work of delicate fibres, which extend from one end to the middle, forming the beginning of what is termed the placenta, after-birth, or secundines, which is the part connecting the child to the mother.

"Seven days after conception, parts of the child are distinguishable to the naked eye; very imperfect, appearing as of a clear jelly, though of some degree of solidity. The head and trunk may be easily distinguished, it being of an oblong figure, the trunk being longest and most delicate. Some small fibres, resembling a plume of feathers, issue from the middle of the child, (the navel,) and terminate in the membrane by which the whole is enclosed. These fibres are the rudiments of the tube connecting the young to the after-birth, called the umbilical cord, or navel string, which connects to the after-birth, or placenta.

"Fifteen days after conception, the head and most prominent features of the face are apparent. The nose resembles a small elevated thread, direct over a line which marks the division of the lips; two black points represent the eyes; and we see two holes in place of ears. The body has also acquired some growth; on each side projections appear, which are the rudiments of the arms and legs. In three weeks, the body is a little enlarged; both the arms and legs are visible. The growth of the arms is quicker than that of the legs; and the fingers separate sooner than the toes. The internal parts now appear; the bones seem as threads. The ribs are disposed on each side as fine threads; the arms, the legs, the fingers, and toes, are also represented by similar threads.

"At one month, the young, called the fætus, is an inchin length. It takes a curved posture in the middle of the liquor that surrounds it; and the covering or membranes, in which the whole is included, are increased and thickened. The whole mass is about an inch and a half in length, of an oval or egg shape. All the parts of the face may be seen; the body is visible; the haunches and belly are prominent; the hands and legs are formed; the fingers and toes are divided; the skin is thin and transparent; the parts in the belly resemble a knot of fibres; the vessels are as fine threads; the bones are still soft, only a few places beginning to assume some degree of solidity. The vessels forming the navel cord extend in a straight line. The after-birth now occupies less space than in the beginning, though its solidity has increased, and it has become thicker than the covering or membranes covering the whole.

"At the end of six weeks, the fætus is about two inches long; the form is more perfect, only the head is longer in proportion to the other parts of the body. About this time the motion of the heart is visible; in fifty days it was perceived to beat for a considerable time after the fætus was extracted from the womb. In two months it is more than two inches in length; the formation of the bones being much more visible. In three months it is near three inches in length, and weighs about three ounces. Some women affirm they have felt its motions about this time; but it is difficult to be certain; motions in the neighbourhood are mistaken for those of the child. Yet the sensations excited by its first motions, depend more on the sensibility of the mother, than on the strength of the child. Before the end of the third month, the head is bent forward, the chin rests on the breast; the knees are elevated, and the legs folded back upon the thighs. One of the hands, often both, touch the face. Afterwards, as it acquires more strength, it perpetually changes its position; though, in general, the head inclines downwards."

It is at the fourth month, that generally the mother feels the motion of the child within, which is called quickening; and which in some produces very considerable alarm; sometimes sickness, hysterical symptoms, vomiting in the night and in the day, either repeated or not, for days. This motion is the only infallible symptom of pregnancy; and generally terminates the unpleasant sickness and diseases preceding.

After this the development or growth of the child becomes much more rapid than in the beginning. At first

the waters, membranes, and after-birth, were much larger in proportion to its size, than at this time, and every day this difference is increased, till the birth, when, in bulk, they appear very inconsiderable in comparison with the child.

About the time of quickening, the womb may be felt floating, as it were, in the lower part of the belly; particularly if the woman relax the surrounding parts by not exerting them. Before this, while the womb is retained in the pelvis, upon putting a finger up the birth-place, while the woman is standing, the mouth of the womb may be felt, lower than in a natural state, as its additional weight causes it to descend. This is very perceptible for some weeks after conception. After this it enlarges, and appears ascending up in the belly, till it grows so large as to be unable to descend through the pelvis.

After conception, the breasts become rather smaller; but in the third month they enlarge; the nipple is surrounded with a brown circle, and frequently a milky fluid can be pressed out. The belly at first becomes somewhat flat, but very soon increases in size in the lower part. In the fifth month, the womb begins to render the belly hard, and may be felt as a ball rising to the middle point between the pubes and navel. In the seventh month it reaches to the navel; in the eighth, half between that and the breast bone; in the ninth it nearly touches that bone, particularly in first pregnancies, when the resistance of the belly prevents the hanging down, as in following pregnancies.

With some persons, generally in the best cases, after the

expiration of nine calendar months, or forty-two weeks after menstruation ceased, the child is so well made, that it is able to live without connection with the mother: making allowances for a few days variation. The delivery, effected by the contraction of the fibres of the womb, which are not designed longer to bear the irritation of such distension, takes place, sometimes not till the hour of delivery, sometimes a few days, at others two or three weeks; the woman feels an increase of anxiety, busies herself for the reception of the infant, moves with difficulty, and frequently complains of restlessness, and pains in the back and loins. As the period approaches, her belly subsides most, in the most favourable cases: her discharge of urine is affected, sometimes suppressed, at others not to be retained; occasionally a lax; generally she is rather costive; and she perceives a discharge of mucus from the vagina tinged with blood. But the history of this expulsion will be reserved till the next letter.

As was remarked, the liquid called "the waters," in a healthy state, resembles the whites of eggs. Among many, however, this appearance does not exist, and the waters become of various qualities; sometimes extremely offensive. The quantity of the waters is also subject to great variations at birth; in some cases there is scarcely half a pint, in others half a gallon has been found.

The means nature provides for the growth of the child are very remarkable. As stated in the commencement, the growth is entirely effected through the after-birth or placenta, which prepares the blood in the proper condition, as our lungs do for respiration; and then it is transmitted by the umbilical or navel cord to the child. The afterbirth is a fleshy substance, its edges thin, differing in weight from one to two pounds; it adheres to the sides of the womb, often to its upper part, called fundus, and receives the blood from the womb.

The navel, or umbilical cord, is composed of two veins, which come from the placenta, and an artery coming from the child, twisted round so well, as to resemble one cord. The blood carried through the veins enters at the navel of the child; thence, in proper vessels, is conveyed to the heart, and by it diffused over all the body for its growth. It returns from thence, and, by the power of the heart, is sent back through the artery of the cord to the placenta, or after-birth, where it again undergoes the change necessary for fitting it for the use of the child. The length of the cord through which it passes varies considerably. It has been known not to exceed six inches, and in other cases to be thirty inches. About eighteen inches is its ordinary length.

Some women, on conceiving, feel such an alteration in the state of the stomach, or in their sensations in general, as apprises them of their situation. "But, usually, the earliest notice is afforded by the obstruction of the monthly discharge. This is an invariable effect of conception; but it must be recollected, that it may take place from other causes. Early after conception the stomach is affected, heart-burn, sourness on the stomach, want of appetite, disgust at the usual food, and sometimes a craving for things formerly not desired. Frequently the woman is sick in the morning, vomiting after getting up, though some are only

sick in the afternoon, sometimes troubled through the day with qualms, faintiness, and inclination to vomit. Some have a constant desire to spit, have the tooth-ache, cough, and other affections of variety of kind and duration, differing in every case.

In some cases, the complexion greatly suffers in pregnancy, the features being affected, as in cases of children with worms; in other cases, the looks are much improved. Sometimes the pulse is as common, though generally it is quicker. Perhaps there is no woman who does not undergo such an alteration in parts or the whole of her system, after conception, as would enable an attentive observer to ascertain the fact. But it is enough for you to know, that there is no one certain sign of pregnancy, excepting the visible motions of the child. In all those cases where doubt exists, and the object is to ascertain the fact, for purposes of punishment, both men and women should unhesitatingly decide on the safe side, suspending all judgment, till proof be unquestionable.

As this is enough of the natural history of the contents of the womb, I proceed to remark on the rules women should observe during pregnancy; and the treatment of some of the most common complaints to which many are subject.

In order for you to discover the very best modes of conducting yourselves during pregnancy, you have only to make a few common observations, and exert a little common sense. The course pointed out by nature, pursued by all the pregnant animals, from inclination; by the women in the lower classes of society, and in the savage

state, from necessity, is the course you must discover, is the proper one for you to pursue, in order to ensure successful child-bearing. It is known that all our domestic animals; mares, cows, sheep, and the like, produce the best young in the largest pastures; and that women moving about in the country have much finer children than those leading sedentary lives in town. Is it necessary that I should press on you the truth, that moderate exercise in the open air, not by starts, but long continued, with simple diet, regularly taken, so necessary for the health of your bodies at all times, is more especially so, during the critical period of child-bearing? It is to be regretted that so many pregnant women lead such inactive lives, not only on their own account, but on account of their children; for doubtless, it is owing to the sluggishness of the actions of the mothers that so many in society are mere stupid masses of flesh and blood. Among the Indians, such want of genius could not be found. Pray believe the declaration, that it is necessary to take the trouble, to make efforts to secure what we want. If you desire health, you must take the trouble to walk or to ride about every day: to breathe a fresh, pure air by night and day, as well for your own as your infant's sake. You must confine yourself to a plain, simple diet, abstaining from every thing stimulating; keep your bowels regularly open, and sit daily in cold water. Your sleep should be regulated with great attention; night companies abandoned, and all exposures, particularly to such as may suddenly alarm you. Your dress should be loose, without tight bandages binding any part of you. I will not speak of your lacing yourselves, confining your waists, compressing your breasts and the contents of the womb; because the laws

are defective in their operation, for not giving prompt punishment to the mother; who, from feelings of vanity, becomes accessary to deforming and destroying the unfortunate contents of her womb.

I again give you the caution of voiding your urine frequently, and particularly, on having the least desire; which was pressed while treating of the womb. You should refer to it, and remember that the mischiefs of inattention may be incalculable.

As of next importance to the evacuation of the bladder, is the daily evacuation of the bowels. What I have urged on this subject, in the second letter, I would press with increased zeal on pregnant woman. It is of ten times the importance during pregnancy. The womb resting on the lower gut, lessens the ability to evacuate; but persevere, and do not remit, till daily at the same hour your bowels are opened. Some have neglected this to such a degree, that they have had a confined column of excrement in their bowels of great length, requiring that they should be turned up, and have it scooped out with the handle of a spoon. If you cannot have a natural evacuation daily, from your own efforts, take an injection; there will be in the end a real saving of trouble by the operation.

The system of women during pregnancy, is always more or less inflammatory; even among the emaciated. Their bodies convert the fat of every part into the circulating blood; which, when drawn, has the buffy coat, characteristic of the high action of their bodies. There is generally

increased irritability of temper, marked by great fretfulness: requiring soothing, not provoking returns. Those who are well should commiserate them; and those pregnant should labour to restrain their petulance and violent temper; constantly bearing in mind, that their acuteness of feeling arises not from any hard circumstances in which they live, but rather from a morbid action in their bodies.

This irritability of the system and mind may be lessened, by a moderate use of the mild tepid bath. The hot bath has produced abortion; but sitting in a long vessel of milk warm water, covering thighs and legs, having it gently poured around the belly, the skin slightly rubbed with a soft hand, will have a strong tendency to preserve and equalize the healthy action of the womb and adjacent parts.

Some women complain greatly of pain in the pubes or front bones, particularly in advanced pregnancies. The womb hangs over the pubes, presses on them, and produces this uneasy feeling. This complaint may be lessened by the above bath; but most by wearing a bandage around the shoulders, extending down each side and around the under part of the belly, so as to support it. This at the same time prevents the belly from hanging over, and becoming so pendulous after delivery. The application of the bandage should be when the person is lying down: it should be very wide; several inches where the belly rests on it; and drawn so as merely to be felt in that position. When the woman rises, the abdomen will rest on it, and great support will be derived from it throughout the day.

Some women have the lower bowels inflamed by the

pressure of the womb, and also a constant desire to void the excrement. The relief for this is moderate bloodletting, sitting in a tub of warm water, and a slight purge of salts or oil; rest, and laying on the belly will be of service. Sometimes the piles are particularly distressing in pregnancy, to be relieved by the means pointed out, while treating of their cure in the second letter.

SICKNESS OF STOMACH.

The next complaint I shall mention, is sickness of stomach and vomiting. Generally this does no harm; but when excessive, it is to be relieved by moderate bleeding, by keeping the bowels open, by cupping, or applying leeches to the stomach, and rubbing laudanum over it; also, with the application of hot cloths to it. The saline draught, made of lime juice, and salt of tartar in effervescence, is very good. Soda water has been drank with success; lemonade, and the like common articles. The internal use of laudanum should be avoided.

HEART BURN.

For heart-burn, the general prescription is prepared chalk, a tea spoonful mixed in water or milk at a dose, every two or three hours. A little soda, potash, or magnesia, may occasionally be taken; sometimes gum arabic and liquorice have done service. The best remedy is a few drops of spirit of hartshorn. I have known large quantities of warm water quickly drank, to relieve the symptoms; gentle vomiting in distressing cases might be tried, excited by putting the finger down the throat. A little bleeding has sometimes done good; and regular exercise never fails to produce the like effect.

COLIC.

In cases of colic, or pains in the bowels from flatulence, when violent, blood-letting should be resorted to, if not at once relieved by injections of warm water: a moderate purge of oil, salts, manna, or cream of tartar, should always be taken. The bowels, during colic, should constantly be kept open, by keeping a piece of soap in the fundament, as recommended in the second letter. Sitting in a tub of warm water, or applying hot cloth's wrung out of hot water, will alleviate the pain.

FAINTING.

In fainting fits, the patient should be kept laying down, exposed to cool air. Moderate bleeding is proper, with slight purging. When the sickness is very great, a mouthful of wine or spirit affords a temporary relief.

SWELLED LEGS.

Swelled legs are very common in the pregnant state. Towards the last, they are often a source of pain and great uneasiness. They are produced by the pressure of the distended womb on the vessels returning the fluids from the lower extremities. Generally they disappear at night, and return daily, particularly in the evening. Fortunately they are not dangerous. A recumbent posture lessens the swelling considerably. Moderate bleedings occasionally are requisite. No local remedies afford half as much relief as wearing laced stockings; sometimes the common stockings, lengthened so as to reach to the body,

and fitting very tight, answer sufficiently; these resist the distension, and support the parts; delivery always terminates this disease.

During pregnancy women are always subject to the same complaints as in the unimpregnated state. For their treatment professional characters should always be consulted. They should bear in mind that their systems in this situation are very inflammatory; and that the remedies ought not to be so very strong as in other situations, particularly when applied to the bowels. Powerful purgatives should never be taken. All that shocks the system should be carefully avoided.

CRAMP.

Doctor W. Moss, a most excellent and judicious writer, of Liverpool, states, on this subject, that "the cramp is not an uncommon attendant on pregnancy, and will attack those at this time, who seldom or never have it at any other. It seldom comes on before the fourth month, and is most common at the latter parts. It most frequently attacks in the night, in bed, in the legs, sometimes in the thighs, hips, and belly.

"Getting up, and standing barefoot on the cold hearth, is a common remedy, and, so far as I have observed, is a safe one. In cases of costiveness, keeping the body open will frequently mitigate it; as also, bleeding, when it is severe and frequent. It will oftentimes be rendered more severe by unusual exercise or fatigue. If instead of the usual way of rubbing the cramped part with the hand, the

part is strongly pressed or grasped with the fingers and hands, more present and temporary relief will be had."

Pouring cold water on the part, rubbing with a woollen cloth briskly, and sleeping under fewer bed clothes, will be found of service.

FLOODING.

The most important and fatal of all complaints to which pregnant women are exposed, is what is called flooding, or loss of blood from the womb. This is brought on by alarms, falls, jolting, over-action, and sometimes from no visible cause. The membranes lining the womb, particularly the after birth, separate from their adhesion to the womb, and the large blood-vessels entering into it, discharge the blood, which then passes through the mouth of the womb in large quantities. The complaint is the more alarming, as the danger is of the most imminent kind when least apparent. Death frequently ensues with very inconsiderable warning.

The treatment of flooding requires much attention and skill. In all cases, medical aid should be had the moment the disease appears. If it cannot be had, you must make the patient continue in bed, as cool, and with as much fresh air as will be tolerably comfortable. In the beginning she should always be blooded freely, rapidly, so as to produce fainting, which should never be checked, as it is at this moment that those clots of blood are formed, which put a stop to the flooding. If no one can be had to bleed directly, bandages around the arms and thighs, so as not to hinder the pulsation, may be applied until the arrival of a

bleeder. Cool air being admitted, the bowels should be opened with a clyster of cold water: every thing heating, as warm clothing, stimulating drinks and diet should be avoided. If the blood continue to flow considerably, stuff up the birth-place a cloth to stop the passage. A cold wet cloth on the belly will tend to stop the discharge: this should be renewed every two or three hours; a bag of ice is the best application. These cold applications (sitting in cold water has been found good) should not be continued so long as to produce chills. If the bleeding still continue, two grains of sugar of lead should be given every hour, until it ceases, or until five or six doses are taken: about twenty grains in a quart of water, one fourth injected in the bowels, and the remainder used in washing the birthplace, will expedite the cure: it may be repeated two or three times. Almost always, these remedies relieve the discharge for the present. The great danger is in its return. In order to prevent the return, no matter how well the patient feels, she must continue in bed two or three weeks, cool and quiet, and ready at all times to apply the cold wet rags up the birth-place, in case of return. I warn you not to disregard this cautious conduct; if you do, ten chances to one, you are dead without an hour's warning.

When the flooding returns, in great degree, in spite of all efforts to prevent, the woman becoming extremely pallid, showing excessive loss of blood, but one remedy is left, and that is to produce an immediate abortion. Unless the danger be very pressing, the advice or direction of a physician should be taken before the destruction of the child. It should, however, be always remembered, that the life of

the child is not to be compared with that of the mother. A forced delivery being determined on, a woman with small hands should be the operator.

The patient should lay on her side, her thighs drawn up near her belly, with a pillow between them. The woman operating should grease her right hand well with the mildest lard or oil, and folding her fingers together as round as possible, should very gradually introduce or push them up the birth-place, gently dilating or extending the parts as she carries her hand forwards. When her hand arrives at the mouth of the womb, she will perceive its edges or lips, and between these she must gently insinuate her finger, so as to pass through the membranes holding the waters: this being done, the waters immediately flow out, and the womb begins to contract. If the flooding cease in this stage, it is well to stop; but if the womb appear relaxed, not contracting, it is necessary to go on, gradually insinuating the fingers in the mouth of the womb, then opening them gently so as to enlarge it; then still gradually introducing the hand and arm, and passing the head of the child, feel for a foot, which you will distinguish by the heel, the toes, and the difference in its feel from the hand, if you hold it as if to shake hands. After taking hold of the foot, it is to be brought down to the birth-place. But the following from Dr. Bard, is a better description of the operation than I can give. "Introducing the hand into the womb, turning the child, and delivering by the feet, is an operation seldom attended with much difficulty or danger, provided it be performed early, before the waters of the womb are fully discharged, and with due deliberation and caution. Whenever it is determined

on, let the woman be brought down to the edge of the bed, still lying on her side, or, as I have generally found most convenient, on her back; her hips a little 'raised, and her feet supported on the lap of an assistant on each side; whilst a double sheet spread under her, over the laps of the assistants, and that of the accoucheur, (sitting on a low seat before her) protects her from cold, and another thrown over her, forms a decent covering. The hand then lubricated with good oil, or fresh hog's lard, and the fingers collected into a cone, is to be gently and slowly introduced, through the vagina to the womb; which, in some women a little advanced in life, especially in case of a first child, may make so much resistance as to require an hour or more; employed in gradual and cautious efforts to overcome; when the circumstances of the case will admit of such delay. The internal orifice is next to be dilated, by introducing first one finger and then another, until by slow and gentle attempts it will admit the hand; remembering always, that by the natural contractions of the womb, the orifice will be more safely and easily dilated, than by the finger. Whenever, therefore, the pains occur, our efforts to dilate are to be suspended, and the pains are to be permitted to produce their effect on the hand. When the pain ceases, a gentle distension is again to be made, which will probably soon occasion another pain; which is again to be permitted to produce its effect. And on some occasions, just as the hand is passing into the womb, it is to be opened and laid flat, lest a violent contraction on the knuckles, should injure, perhaps rupture the neck, which is the part most liable to such an accident. The orifice of the womb being sufficiently dilated, if the hand can then be easily passed over that part of the placenta which has

been already separated, until it reach the membranes, that is to be done; and breaking the membranes, it is to be immediately passed into the womb. But if we cannot readily pass the separated portion of the placenta, and the flooding be profuse, it may be necessary to pass through the placenta; which is less dangerous either to the mother or child, than to separate a larger portion, by passing the hand between it and the uterus. The hand being introduced into the womb, the neck will generally cling so close round the wrist as to prevent the escape of much water, and we shall find room to act with freedom; and as the same pressure generally suspends the hæmorrhage, we may take time for deliberation. It is therefore generally proper at this period to rest a few minutes, to recover any fatigue we may have sustained; and to refresh the woman by some proper drink, whilst we deliberate on the circumstances of the case, consider the position of the child, and the readiest way to get at the feet. It will be recollected, that the most natural presentation is the most common; and that in that case, the child's head is at the brim of the pelvis, with the face and belly to the back of the mother, the knees bent to its breast, and the feet towards the fundus uteri. As therefore, the child must ultimately be turned, this may be the best time to push the head and shoulders up towards the fundus, and to turn the face of the child to the back of the mother; which is most easily done within the membranes, and by which the feet will be brought within reach of the hand; and having secured them, they may be easily brought by a waving motion into the vagina. It is always best, when it can easily be done, to bring down both feet; one however will answer, and generally the child can be turned and delivered by

one, with nearly as much ease as by both. In bringing down the feet, bend them a little to either side where you find most room, and remember always to desist during the action of a pain, and proceed again during the interval. After this we may take the assistance of the pains in delivering the hips and body of the child; cautiously extracting during the pains from side to side, and from pubes to sacrum. As the hips are brought down, carefully consider again how the child lies in the womb; with its belly to the belly or back of the mother; and take care, if it shall be necessary, to turn it gradually, so that by the time it shall be delivered as far as the arm pits, the belly of the child shall certainly be to the back of the mother, which is the position in which the arms and head can be most easily delivered. And now, or rather somewhat before this, examine the navel string, and occasionally pull it down a little, so as to prevent its being put on the stretch. If the pulse in the navel string be strong, and the hæmorrhage suspended, we may still proceed with deliberation, and take the assistance of the pains in accomplishing the delivery. But if the pulsation has ceased in the cord, or if the woman floods freely, either the child or the mother may be lost by delay; and it becomes necessary to finish the delivery as soon as we prudently can. If therefore, the child's arms make any resistance, introduce one finger under the pubes, and carrying it along the child's arm to the elbow, pull that down a little, then go on to the wrist, it will easily turn down into the hollow of the sacrum, and be delivered; the other arm will be still more easily delivered in the same way. But let it always be remembered, that caution and dexterity are more necessary than force; by which, unskilfully applied, there will be great danger of breaking the child's

arms. Having delivered the arms, lay the body of the child on your left arm, and passing two fingers of that hand into the vagina, introduce them into the child's mouth, and draw the lower jaw down a little, so that, if possible, you may extend the fingers above the mouth along the child's nose; then placing the fingers of the right hand across the child's neck, again cautiously extract during the pains, sometimes pulling down towards the sacrum, again up towards the pubes, and from side to side; and again pushing down and backwards towards the hollow of the sacrum, so as to free the occiput from the pubes. The chin being brought down as low as the foshette, stand up, and raising the back of the child towards the belly of the mother, the face will turn out from the perineum, and the delivery be finished.

"In giving this description, I have purposely supposed the most favourable circumstances that occur in a case of so much importance: the hæmorrhage to be restrained by the introduction of the hand: and the greater part of the waters to be retained by the wrist plugging up the orifice of the womb; that I might describe the successive steps of the operation minutely and distinctly: but we must not flatter ourselves, that this will generally, or even frequently, be the case. There are few situations of greater terror or alarm, than a woman flooding at the latter end of pregnancy; and we are frequently called on to decide instantly, and to act promptly; yet we must never suffer ourselves to be confused or hurried; for, even during the operation, many occurrences may happen, which call as much for cool reflection, as for prompt and ready execution. Of these I shall take notice in describing those preternatural cases in which they are most likely to occur. In

many of these cases, women are so much exhausted by loss of blood, that even after a safe delivery, they require great attention to recruit their strength and save their lives. Rest, promoted by small anodynes, in some cordial julap, such as spirituous cinnamon water, or what can always be had, good toddy with nutmeg, are the remedies first called for: these must be succeeded by small portions of nourishing diet, frequently repeated, and by tonics, in which an infusion of the Peruvian bark and cinnamon in claret agreeably sweetened, makes a pleasant and efficacious mixture. The after-birth is never to be hurried." The operation, altogether, may appear difficult to perform, but it is not. The exertion of a good sound sense will ensure success. Many women have performed the operation on themselves, to get rid of a disgraceful pregnancy: they have succeeded by simply introducing the finger between the lips of the womb; so as to burst the bag of waters, and immediately an abortion comes on. When the murder is determined on, it is certainly better to do it, so as to save the mother's life for repentance, than that she should be destroyed, as is often the case, by taking drastic purgatives to effect this object.

However, of late there has been discovered an article called ergot, which is the musty, dark looking heads of rye, found in most fields of rye when nearly ripe. These heads reduced to powder, are used, it is said, on good authority, for producing abortion, without injuring the mother. The dose is twenty grains, mixed in a little molasses and water; and it is stated, that the operation is such, that immediately after being taken, the contraction of the womb commences. Whether this medicine will supersede the man-

ner of producing the delivery above pointed out, remains to be determined by experience. Even if this medicine succeeds, agreeably to expectation, I would prefer the mode of suppressing the flooding by perforating the membranes with the finger, since without introducing the hand in the womb to turn the child, as above described, this perforation or bursting of the bag of waters has been successful; more perfectly so than I supposed, on writing the first part of the operation for turning. I would therefore always recommend for flooding in excess, the perforation of the membranes with the finger, before attempting to turn the child.

Abortion. Connected with floodings, during pregnancy, is abortion, or premature discharge of the contents of the womb, ending in its destruction. Not having had any particular experience on this subject, I give the best brief view of it from Dr. Bard; a few words of which are changed.

"Abortion happens frequently, and deprives women of their health and happiness. Very strong and very weak women are most prone to it; but the numbers of the strong bear no proportion to those who are of delicate constitutions; the numbers of active country women, to the more indolent and inactive inhabitants of cities; the number of women of good sense, of calm and steady minds, to the weak, irritable and passionate: hence a most important lesson may be learnt, that good health, and a good education, are the best preventives. It then, in a great degree, depends upon mothers, upon the care they take in rearing their girls, restraining the indulgence in all passions, to lessen this great and common evil.

"Another observation is, that women who have once miscarried, are apt to miscarry again at the same period, from the same causes, and with the same symptoms. So that if the habit be once acquired, it becomes difficult to remove. Hence the importance of great care in young women, not to miscarry in their first pregnancy; and the propriety of particularly guarding against the causes that produced it at first, in all following pregnancies.

"Miscarriages are most apt to occur between the eighth and the twelfth week, and from the fifth to the seventh month, periods which will require particular attention; though a prudent care be at all times necessary, as the cause of the miscarriage may, and commonly does exist at a much earlier period than that at which the abortion occurs.

"The causes of abortion may be reduced to the death of the child; to the separation of the bag or membranes enclosing it, from the womb, and to the disordered contraction or action of the womb.

"That the child may die, independently of any disease in the mother, has been proved by many cases in which a healthy mother has discharged it, with marks of considerable disease.

"A frequent cause of abortion is the separation of the membranes lining the womb, and surrounding the child. The extreme delicacy and tender structure of the vessels connecting this membrane to the womb, especially in the early months of pregnancy, renders the separation not very difficult, by slight causes: hence miscarriages happen most frequently between the eighth and sixteenth week. Yet

the cause operates much earlier; for sometimes, before a small rupture occurs between the after-birth, or any part of the membranes and the womb, the blood is gradually effused; thereby increasing the separation, till the womb, being excited to action, expels its contents. This cause of miscarriage cannot be detected before labour, and is proved only by the expulsion of a quantity of coagulated blood, immediately before or after the delivery. The causes of the separation of the membranes from the womb, are, generally, too much fulness of blood in the system, arising from free living and little exertion, indulgence in excessive joy, sudden or violent exercise, awkward postures, stimulating food or drink, costive habit, and excessive passions. These operating most directly after marriages, require that greater attention should then be paid by women to guard against them. The remedy for this state is moderate bleeding, keeping the bowels open, and temperance and regularity in every action.

"The disordered action of the womb itself, is a great cause of abortions. Disorders or affections of any part in the neighbourhood are apt to produce it. This points out the propriety of promptly treating any affections about the pelvis in the most judicious, mild manner. The warm bath and bleeding are the great remedies, and should be administered by the ablest physicians for all the complaints of these regions, in pregnancy. From the recurrences of abortions the womb is very apt to get in such a state, that it will not enlarge beyond a certain size, and as soon as it arrives at this size, it contracts, and expels its contents, as if from habit. This affords a powerful reason for doing all that can be done to prevent the formation of the habit, by preventing the first abortions.

"The signs of approaching miscarriage are, absence of the morning sickness, subsidence of the breasts, a discharge of blood, or of water from the birth-place, and regular labour pains. A coldness of the belly, or sense of weight, and cessation of motion after quickening, are said to denote the death of the child; but this is very equivocal, as many women have produced healthy children, when, from these symptoms, they were supposed dead for some time. In all cases the woman is not to act carelessly, as she may be mistaken, and as the delivery will be always easier and safer when left to nature, than when hurried.

"A discharge of blood from the womb, although a very frequent, and generally the most important symptom, is not always followed by miscarriage;" as you will find, by reference to what was said on floodings.

Doctor Burns observes, "when abortion is going to take place, the patient feels pain in the back and lower part of the belly, with uneasiness like colic, and a sensation of slackness. This state, if not preceded, is soon followed by a discharge of blood, and presently regular bearing down pains are excited. The discharge is sometimes from the commencement red and profuse; but in other cases it is at first rather watery, or sparing in quantity; presently it flows more copiously, and considerable clots come away, often pieces of skinny or fleshy looking substance may be discovered. In some cases there is much pain and little discharge, or the reverse may happen, or both may be considerable and protracted. If the miscarriage takes place at a very early period, little can be detected except clotted blood, but if every thing be put

in a basin of water, sometimes a more solid substance may be observed, like a chesnut, which, when examined, contains a small bag of water with a child in it, no larger than a bee. If the third month be completed, we find that the whole conception comes away at once, like a bag covered with fringed vessels; or, if the bag burst before it comes away, a gush of water takes place; by and by the child is expelled, and some time after the after-birth comes away. Abortion is sometimes preceded by shivering, attended with great pains and a feeling of sickness or sinking about the stomach, or a tendency to faint; occasionally the patient is greatly troubled with wind in the stomach or bowels. But the symptoms vary in each case, as does the duration. In some the whole process is over in six hours, in others it is protracted for many days."

The treatment of females during a miscarriage is clear and simple. On the least attack, or symptoms of its approach, they should go to bed, with a resolve not to rise until the event is decided. If of a full habit, they should be blooded. They must be kept cool and quiet, avoiding every thing heating, drinking only cold water, or some weak tea. The bowels may be opened by injecting warm water. Sitting in a tub of warm water will always lessen the irritation of the womb.

The application of large quantities of sweet oil around the back, belly, and breasts, will also have a considerable offect in allaying the action.

When the expulsion has actually commenced, it is impossible to prevent the completion. The woman should

keep quiet, as in common labour. A cold, wet rag to the belly will promote the contraction of the womb. Sometimes the contents of the womb (called ovum) lodge either at its neck or in the birth-place, when it is proper to introduce the finger, and move it from side to side, for hurrying its expulsion.

The after-treatment, particularly in full habits of body, is, to evacuate freely by bleeding and purging, with salts, cream of tartar, and oil. From neglect to do this, inflammations have come on, ending in lamentable derangement of these parts; as cancers, dropsies, and barrenness. The treatment which cures the tendency of the system to abortions, is not so very certain of success. Before pregnancy, bleed, live low, to take regular, gentle exercise, to avoid violence and excesses, to salivate, and to change the general habits of the body, as well as residence, are the general prescriptions which have done good.

The course I would prescribe is, to revolutionize every habit, to eat a different diet, particularly using sweet oil, to take a new exercise; to arouse the system every morning by the shower bath of salt water, to apply the flesh-brush to the skin every night. When conception has taken place, the most gentle exercise, regularity in eating simple food, and evacuating the bowels, daily applying sweet oil round the back and belly; to keep the birth-place free from all irritating matters, by nightly washing in warm water; to bleed on the slightest feel of fever or fulness; and to preserve the breasts in a state free from irritation, by applying sweet oil to them, and keeping them unconfined. Above all, I would the most earnestly re-

commend, as the most certain cure, to have the breasts drawn, particularly after an abortion. When the abortion has taken place, a child or grown person may suck the breasts, and milk will be secreted. This secretion of milk should be kept up for six or eight months. In one instance, in my neighbourhood, a child was taken by a lady who was subject to, and then had an abortion, and she raised it in good health. After a few months, the lady became pregnant, and, to her great joy, passed, for the first time, to her full time for delivery. This is, unquestionably, the most certain mode of enabling a woman to pass to her full time, which has yet been discovered.

BARRENNESS.

Inability to conceive, is a misfortune distressing many women, as much as habitual abortion. It is often followed by constitutional affections, of fatal tendencies. The cure has been sought after with great earnestness.

In some instances barrenness proceeds from defective organization. These cases are, however, very rare, and cannot be cured by art. The next general cause is a torpor, and irregular action in the womb and its appendages, which often yields to judicious management.

The general means of relieving this misfortune which have been prescribed are, to revolutionize the system, to travel, to excite action on the surface by the salt bath, to vary the exercise and habits as much as possible; and in some instances, salivation has been resorted to with good success.

Viewing the subject of the propagation of our species in an important light, I early gave it considerable attention. The theories published on this subject, appeared too defective to be satisfactory. The result of my investigation, as will appear from reference to the medical repository, was, that the presence of a pure vital air was necessary for successful copulation, or the first excitement of animal life; that in a foul impure air, impregnation could not take place. These inferences appeared the more correct, as those who cohabit like the negroes, in open fields, at the sides of hills, seldom fail in impregnation. All the animals of creation require a similar pure air. It follows of course, that the connection in the foul air of beds, which will often extinguish a candle, is improper: that persons solicitous of success in the business, ought always to get into fresh pure air: that, for a like reason, when the birth-place secretes freely, it should be well wiped, as the secretion might absorb the pure air.

But the great, the important means of rousing the womb to action, will be found by exciting the breasts to their natural action. The connection between the womb and breasts, has been before remarked; it is scarcely possible to excite an action in the one, without affecting the other.

The most natural action for the breasts is the secretion of milk. They have often been excited to the discharge, without pregnancy. A child losing its mother, and sleeping with a female friend, has been known in the night, to get the nipple in the mouth, and to excite milk by the morning: the discovery led to the resort, and the child was abundantly nourished at the breast of the maid.

There can be no question that any female breast may be excited to the secretion of milk. The means are simple. The woman should drink freely of any liquid, and live freely. The breasts should be handled frequently, rubbed with the softest hand, bathed in sweet oil, and a warm poultice applied over the whole of them for an hour. Then it should be removed, and the breasts still be handled and sucked gently, at repeated intervals throughout the day, for several minutes. Particularly every morning, noon, and night, the operation should be renewed until the secretion comes. A young dog has often been used for drawing the breasts. When the action is excited, it should be kept up for months, by daily sucking them: about the time of discontinuance, and sometime after, impregnation may most probably be effected. There can be no doubt of the womb's being more acted upon, more roused to natural action by these means, than by any other we know.

I have recommended the excitement of this secretion, as will appear from reference, to those labouring under suppressed or profuse menstruation; also to relieve the womb from habitual miscarriages. I will now only add, that as milk is the most delicious food taken by children, that the ladies declining marriage, might render an essential and honourable service in raising the human family. Let them excite their breasts to the secretion of milk, and they will have the joy of gratifying many poor infants pining away for natural food, and many poor mothers, too reduced to afford sufficient nourishment. The consequent exemption from spleen, and the pleasure of contributing to the growth of some friend's, some sister's child, will

cause a revolution in public sentiment, a general declaration, that the old maids are as valuable, as estimable as the young; which I sincerely pray God may be the fortunate issue.

LETTER VII.

History of natural labour—offices of the attendant, or midwife, in such cases—recapitulation—Questions, and answers in illustration.

The subject to which I have now to request your attention is extremely interesting; one of the most natural operations to which your systems are liable. I mean the delivery of the contents of the womb, by what is commonly called labour. Should the person have been properly occupied, the process will give but inconsiderable pain. In the hot countries, among the negroes, and among the savages, bringing forth takes but very little time, and is attended with most inconsiderable suffering. It does not there seem to be verified, that "in sorrow shalt thou bring forth," but only where the rules or laws of nature are disregarded.

Indeed, considering the extraordinary facilities nature has provided for the birth of the human kind; considering the numbers who bring forth daily without suffering, it seems wonderful how so many ladies, on such occasions, can make such a to do about the business, can so idly injure themselves with unhappy conceits, can apprehend any thing but the most fortunate termination of their case.

But the cause of all such groundless fears may be traced to the arts and ignorance of designing persons. A thousand times more notice is taken of one little irregularity of the attendants, than of the many cases nature conducts, without aid. This operates on the fears of the women; each considers the worst may be her case; assistants at extravagant rates are sent for; and they pocket, commonly very handsomely, for the folly of the patient.

I beseech you, for the sake of decency, of justice to your attendants, of charity to poor women, abandon such improper infatuation; believe the truth, when you are in labour, that five thousand chances to one, you will do perfectly well without any assistance; that in ten thousand instances, to one to the contrary, the most common women can render you all proper assistance, without the meddling of men operators. Their huge fists, zeal for hurry, and spirit for acting, have certainly done more harm than the improper conduct of women, of which they are so fond of talking. This, Dr. Denman, Dr. Buchan, and every really great physician, have observed.

But you are to thank neither man or woman for your labours; nature does the whole business for you, and would probably for ever do it perfectly, if you would merely preserve sense enough to let her operate without your fears, or the meddling of others.

What is the operation? By the contraction of your lower bowels, and the pressure produced by the exertions of the muscles connected with the parts, their contents are expelled; which, when hardened and done rapidly, has often torn the parts. So, by the contraction of the womb, and the muscles connected, its contents are squeezed downwards; and by over acting, improper exertion, come out so fast as to tear the surrounding parts. The great secret to be pressed on your minds in the very beginning of this subject, is, do nothing, leave nature to herself, allow only the involuntary powers to operate; and the discharge will be productive of as little injury in the case of the womb, as in the case of the bowels. Merely to receive what nature gives up, is nearly as much the duty of attendants in the one case, as in the other.

In manufacturing countries, where men are enfeebled, and female children are confined till disease deforms their bones, surgical assistance becomes necessary in about one case in a thousand. It is only the services of physicians, (not midwives) which are more frequently wanted. But in other countries, where such evils do not exist, it is most preposterous to follow the custom emanating from such misfortunes.

If I can impress it on your minds, that the operation of shild-bearing is most simple; that it is performed by your own systems, not by attendants' hands; that the pains of it are to be lessened by leading a proper life of industry, in pure air, and cleanliness and temperance; that you will seldom require the least assistance from any but your own sex, cautioned not to interfere with you; that when you do want other assistance, in almost every instance a good physician's prescriptions will afford you relief, with a woman's hands to operate, I shall have effected a great deal.

For by this, there will be an abatement of your fears, which will greatly abate the pains and dangers of your body, so greatly increased by your incessant fears and forebodings, before and at labour.

The natural history of labour, and the offices to be performed by attendants, are as follows:

There are slight and flying pains over the belly, the womb appears to contract, or, as the widwives say, it falls down, or descends lower in the belly, sometimes even for some days previous. Gradually these pains increase, and the intermission between them becomes less. The pains are produced unquestionably by the contraction of the fibres of the womb, and differ in severity according to the peculiarity of the person; in some being so slight, the child has been evacuated in the necessary, without a knowledge of the birth. Many other parts of the body become pained, in consequence of their sympathy with the womb. Generally in a few hours, sometimes in less than an hour, the business is completed; of the rapidity of which, some idea may be formed by the rapidity of the pains or contractions.

The following excellent account is from Dr. Denman. "About the commencement of the opening of the mouth of the womb, by the pushing forward of its contents, the anxiety of the woman appears to be greatest; her manner excites great sympathy, and it is necessary the attendants should console her, and do nothing, whatever may be the entreaty of herself or friends. In the beginning of labour, there is frequently one or more chills, called *rigors*, with

or without a sense of cold in parts of the body, which being void of danger, and showing that the whole system is occupied in the business, ought not to be alarming. There is frequently an inclination to avoid urine, sometimes an inability to retain it, sometimes an inability to retain the excrement, and a constant discharge of it, which is to be indulged in the beginning, aided by a clyster of warm water, if convenient; care being taken not to sit down low for the evacuation, lest the child should be thrust out. If the evacuation can be had lying down, it is always best. There is a colourless mucus discharged from the birth-place, which is sometimes tinged with blood, and is called a shew.

"The pains of labour return periodically; the intervals between them being of different continuance. In the beginning, they are slight in degree, and have long intervals; but, as the labour advances, they become more violent, and the intervals shorter. Sometimes the pains are alternately strong and weak, or two weak, then one strong; and there is reason to think, that every variety has its advantage, by being suited to each patient. In every circumstance," continues the doctor, " which relates to natural labour, it is impossible not to see, and not to admire the wisdom and goodness of Providence, in making the power, and fitting the exercise, with a marked regard to the safety of both mother and child. This should afford a lesson of patience to those females who become intractable, losing their self-possession, add to the evils of their situation, as well as to those practitioners, who, being led away by popular errors, attempt to add to the strength of the pains, or to quicken their returns; acting as if they thought there was no other evil to be dreaded but a slow

labour; WHICH HAS DONE MORE MISCHIEF THAN THE MOST SKILFUL PRACTICE HAS DONE GOOD.

Although there be some repetition, I give the following from Dr. Burns, to impress the more on your minds the general history of labour.

"The first stage of labour is preceded or accompanied by a subsidence of the belly; and the child is often felt, even for some days, to be carried lower than formerly. The pains at first are short, and come seldom. They go entirely off during regular intervals; but they often leave a considerable degree of general uneasiness, so that the woman feels restless and uncomfortable, or is hot and cold by times; and in some cases has a sensation of sickness, or gripes, or a troublesome desire to make water. The pains are usually felt chiefly in the back; but in some cases they often skip to the fore part of the belly, or are from the first felt there. They are at first very slight, and but only for a short time, perhaps not half a minute, and return at the interval of fully half an hour; but they come on with more frequency as the labour continues, and are felt lower down in the back, short around to the top of the thighs, and cramps are also occasionally felt in the legs. They are also attended with an inclination to catch at, or take hold of the chair, or of any thing which is near.

"The pains, after a short time, gradually increase in sharpness and frequency; they often seem to decline for a time, after which they again become brisker. There is a great diversity in the situation and degree of the pain, for in some cases it is felt chiefly in the belly, in others in the

back; sometimes it is attended with shivering and trembling, in other cases with sickness and vomiting. These circumstances, though unpleasant to the patient, are by no means unfavourable, but, on the contrary, often called a quick labour.

"This stage is attended with a discharge of slimy fluid, which, when the orifice of the womb is considerably opened, becomes of a red colour. These pains are often sharp, and seem to be doing no good, and the woman is apt to become restless and fretful; and as they are sometimes attended with sickness, heart-burn, and vomiting, she becomes impatient and depressed in her spirits.

"These pains proceed from the attempt made by nature to dilate the mouth of the womb, and they must continue till this be accomplished. The complete dilatation is assisted and rendered both easier, and frequently more speedy, by the protrusion, through the mouth of the womb into the vagina, of part of the bag which contains the child, and the water which envelops it. The degree to which it is pushed out of the womb, during a pain, varies much in different cures. Sometimes, it forms a very slight projection; at others it is very bulky, as large as a child's head; when these membranes begin to be pushed down, the water is said to "gather."

"The mouth of the womb being considerably opened by these operations, efforts are next made by the system to press down the child, to empty the womb. These produce a change in the pains, which are attended with the inclination to press down. This gradually increases, and at last the sensation of bearing down becomes very strong, almost irresistible; and it is observed, that though the pains be strong and forcing, they produce less complaint, than those which in the beginning of labour appeared to be less severe. There is a great variety in the duration of this part of the process. It is sometimes gradual and slow; in other cases sudden and rapid. The pains may be strong and forcing, have very little interruption, may come on at regular periods, with complete intervals of ease."

During this period, the bag, or membranes holding the waters, in which the child lies, usually bursts, and the liquor contained is discharged, at least the greater part. This event is soon followed by an increase of the pains, which become more forcing, and the spirits of the woman rise in proportion. At length the head of the child advances to the birth-place; (refer to figure the ninth;) sometimes it seems to draw back; again it advances and distends the external parts gradually and repeatedly; this being designed for their dilatation. The parts dilating, the head at length passing, gives a momentary relief to the woman. In a few minutes the pains return, the body of the child is expelled, it begins to cry as the air penetrates its lungs; the woman appears, from the release of pain, and the pleasure of being a mother, to have the happiest feelings.

In a few minutes after, differing in each case, the womb continuing to contract, the pains are felt, and the fleshy substance, called the after-birth, or placenta, or secundines, with the membranous bag which contained the whole, and clots of coagulated blood, are all expelled by a similar operation; the pains being half as severe as those attending the expulsion of the head.

"The duration of this process is various, but it is generally longer in the first child than afterwards. This is particularly the case in the second stage of labour, when the external parts being rigid, not having been dilated, most remarkable in those marrying late, the passage of the head is delayed. Some women are always expeditious, others tedious in the operation. Some have the waters discharged early, others not till the child is born. Some have much sickness, as retching, shaking, others none at all. In short, there is a great variety in these respects with different women, or with the same woman in different labours. In a natural labour, the whole process is concluded within twenty-four hours; oftentimes in a much shorter period."

With this description of natural births, I proceed to speak of the duties the attendant has to perform. In general, one assistant is enough, two are a great abundance, and more than three persons should never be allowed to enter the room. I shall suppose that no midwife can be had at the time, or if an ignorant one, that some lady of sense enough to understand the most simple things, will stand by and direct. But admitting a midwife of great conceit, or of great reputation, attend, the directions are to be attended to; and the friend of the woman in labour should stand by, and not suffer the dictates of experience and common sense to be sacrificed to notions of dexterity and successful performance, which have slain their thousands and tens of thousands.

The first business is to sooth the woman, to compose her mind as much as possible. All other animals, and women in a state of nature, retire to some sequestered spot to bring forth. There should be but little talking, that little for consolation, and recommending patience, never for the entertainment of the by-standers, as is generally the case. The largest room should be taken for the operation; the bed neither exposed to a current of air, or the heat of a fire. Free airing is very important from the beginning to the end; nothing being more prejudicial than a confined atmosphere, for mother and child.

The moment a woman conceives herself in labour, she ought to be dressed in the loosest clothes, of the kind that may be most easily removed; then to have every thing that may be wanted for herself or infant ready in the room.

Instead of the parade that is made about getting the bed ready, all that is necessary, is a bed made up as others, with, on the part her middle is to rest, several separate cloths, that the top one may be pulled away from under her, as it becomes dirty, leaving the next one for the upper piece; and so on till all are taken away.

The articles required in the room, after baby cloths, are cold water for drinking, and for a bath if accident occur; any weak tea, or gruel, in case of its being desired; then a clyster pipe; warm water and soap to be in constant readiness; a pair of scissors and a little cord of tape, or any string, to tie the navel with; old cloths for wiping up whatever may be offensive to cleanliness, or to the sight.

The first thing required of an attendant to a woman supposed to be in labour, is to ascertain if the labour has actually commenced, an operation called TOUCHING. This is done by introducing the fore-finger up the birth-place, to feel if the mouth of the womb be opening. The fore-finger is introduced near the pubes, and then pushed backwards as a pain is coming on. If the orifice of the womb appears to dilate during the pain, the woman is certainly in labour; and this is the only certain proof of its existence.

The best position for touching is when the woman is standing, leaning on the shoulder of the one feeling. It may be well done while she is lying on her side. It should always be done with the greatest gentleness, as from violence the bag of waters have often been bursted, to the great injury of the case. In general, no oil or grease is necessary for the operation, (as formerly used,) since the natural secretions are unquestionably the best for lubrication. The finger being introduced, it should be held still until a pain is commencing, when the mouth of the womb will be felt opening. This dilatation of the mouth of the womb being ascertained, no more inspection should be made for some time, as frequent examinations do no good, and much irritate and inflame the parts.

When the pains have frequently recurred, always, if there has been an evacuation of the waters from the womb, the woman should be touched again; sometimes the hard head of the child may be felt, resting against the front bones: if the waters have been evacuated, the hairy scalp of the child, sometimes in parts, folded as a cord, the openings

called the sutures, and the back fontanelle, sometimes the pulsation of an artery, may be felt. In every inspection, again and again, the attendant should feel most gently.

In addition to the dilatation of the mouth of the womb, the existence of true labour may generally be predicted, from the "recurrence of the pains at regular intervals, by affecting the back, and shooting around to the thighs, and by protruding the bag, as a bladder of water, through the mouth of the womb."

The actual existence of the labour being established, the woman should evacuate her urine and excrement, the last by the aid of a clyster of warm water and soap. If the urine have not been evacuated for twelve hours, a catheter ought to be used for the purpose, unless sitting in a tub of warm water, or an evacuation from the bowels, produce the discharge. I repeat, have the bowels well opened with an injection, because the confined excrement obstructs the passage of the child's head, and causes the parts of the mother to be destroyed by the compression; because, unless this be done, there is an evacuation at birth, so offensive as often to interrupt the operations of the attendants; and because it proves of great service to the woman after labour. Indeed, ladies, you will save yourselves a world of suffering, if you will attend to the injunction of emptying your bladder and bowels on the approach of a delivery.

The directions for a woman to observe when labour has commenced, are various; but those most consistent with common sense are the best. Dr. Burns says, that " in the first stage of labour the patient may stand, walk, or sit, or

remain in bed, as she is inclined; but by no means stand as long, or walk so much, by way of forwarding the labour, as is productive of fatigue. Women should always be impressed, that a slow labour is much less injurious than those which are quick. When the pains become frequent and pressing, she should keep to her bed.

"Before the child is delivered, there is often a strong desire to rise to go to stool, but is not to be indulged, as the child might, with great danger, be born when the woman rises up. Sometimes it has been born in the pot!

"Fretting should be avoided as much as possible. All voluntary attempts to press down, called bearing down, must—must be avoided, as by expediting the passage of the head before the dilatation is effected, the parts might be miserably torn."

After the head of the child descends in the birth-place, the external parts begin to obtrude, and great attention is necessary, not to do, but to guard against doing too much. An account of all ills brought on by interfering in this stage, would appear incredible. All parties seem, in this stage, to unite in doing the wrong of hurrying the birth. The woman should be confined to her bed. The best position for all parties, is lying on her side, legs drawn near the belly, and a pillow between the thighs. Talk to her, to prevent her bearing down. Keep the hand applied between the fundament and birth-place, (part called perineum.) The pains in this stage of labour, are called bearing or forcing pains; as the woman, by her exertion, bearing down, forces, most improperly, the delivery. As the head

advances, push your hand with a force equal to about pushing forwards a ten pound weight. If the head be coming too rapidly, extend your hand, so as to delay its passage, for a pain or two pains more; tell the woman not to bear down; and still as the child's head passes, keep the hand pressing against this perineum, so as to incline the child's head forwards, towards the pubes. The head having passed, the perineum retracts, a respite is felt. The body of the child is not then to be touched, the pains of the mother will soon expel it; they alone are to do it. The hand is to be kept on the perineum, as the shoulders and hips pass, pressing as before, though with less force.

The child being thus born by the powers of the mother, it is to be left, its head free for fresh air, during its crying; it is not to be touched for some time. When the navel cord begins to lessen its pulsation, always remain from eight to twenty minutes, the cord is to be tied within two or three inches of the child's navel, by any kind of string, moderately tight; then tie it again, two or four inches from the last knot, towards the mother, in like manner; the cord between the knots to be cut in two with a knife or scissors; always look while doing this, lest some parts may be cut, which should not be, as has been done.

The child being handed over to be washed in warm water, and to be dressed in the most free, loose, easy, possible manner, the woman is to remain quiet. The after-birth, placenta, and membranes, are to come away, and soon the womb contracts, the pains return, and the whole is expelled. If it be detained longer than thirty minutes, the belly is to be rubbed, the woman may roll over in bed to the

other side, the cord may be pulled a little during a pain, with a force equal to one pound. Some robust persons have been advised with success to stand up a minute or two; these means not succeeding, a cold wet rag applied to the belly will excite the action; lastly, the finger may be pushed up the birth-place, and being turned around the sides of the womb, excites it to contraction. Remember, the object is not to drag away the after-birth, but it is to cause the womb to contract, to expel it. If there be much loss of blood, cold water to the belly, by means of wet rags, and pushed a little way up the birth-place, will stop it; fainting is to be encouraged, not hindered, as during fainting the bleeding is checked.

The after-birth being discharged by the contracting power of the womb, the woman is still to be kept reclining; and being wiped dry, is to be rolled over to the dry and other side of the bed; turning over is best; she may be lifted as she lies, but should not elevate herself. Any succession of cloths may be pushed under her; and between her thighs, at the birth-place, a rag is to be applied, to absorb the discharge that follows.

Thus, you must be struck with what inconsiderable offices are to be performed by midwives. A great duty is, to know when not to act, which very few have learnt properly. In 999 cases out of the thousand, in this country, excepting when a physician is wanted to prescribe for the constitution, they may be summed as follows, and ought to be committed to memory by every female.

[&]quot;To have the woman's urine and excrement well eva-

cuated in the beginning; to keep her composed and quiet; charging not to exert her voluntary powers, as the work is best done by the involuntary; to be careful not to burst the bag containing the waters, by fingering; nor to be too constantly fingering the parts. When nearly ready for delivery, to keep her lying on her side: knees drawn upwards, and opened by a pillow between them. As the child's head advances, and distends the parts about the fundament, to keep the palm of the hand ready to press as the head protrudes, pressing equally and gently on the perineum, so as to incline the head forwards, towards the front or pubes; and when, as the child appears to be advancing very rapidly, threatening to pass before the parts are opened, to incline the hand more forwards, so as to delay its passage for a pain or two; in this stage particularly, entreating the woman to be quiet; to let the child's body be expelled by the powers of the mother; of the cord, be sure that it is not compressed or tightened, and in ten or twenty minutes, when its pulse ceases, tie it in two places, two or three inches from the navel, then towards the mother, and cut it between the knots; to wait for the after-birth; if it do not come away in thirty or fifty minutes, to roll the woman on her belly and back again; to rub the belly with the hand, and to pull the cord with a force not exceeding one pound weight, to excite the womb to contraction; lastly, in an hour, applying for a minute, a cold wet rag to the belly, another to the birth-place, and always doing this when there appears to be a great loss of blood. The woman to be rolled over, wiped dry, and put in her place for repose." Duties which can be done by the lowest servants, and not disgraceful, if performed by the highest, to a suffering mother.

If these offices be compared with those generally performed by common attendants, a great difference will be found. True, persons frequently do very well, under the different and great varieties of treatment. But it only shows that women have wonderful constitutions, and can stand against incredible exposures, and ill treatment.

I will now make a few questions and give their answers, the more effectually to impress on ladies' minds the offices to be performed at labour.

- Q. What is the first thing a woman in labour should attend to? A. The evacuation of the bladder and bowels, in order to prevent the compression and injury of these parts.
- Q. What ought the attendant first to do? A. Introduce the finger up the birth-place, and gently, during a pain, feel the opening of the mouth of the womb, in order to pronounce certainly whether the labour exists.
- Q. What will she feel on introducing her finger? A. Probably the bag of waters, like a bladder, which she is to touch so gently as not to endanger bursting; if the labour has not advanced, she only feels the mouth of the womb gradually dilating at each pain.
- Q: When the waters are discharged, what should the attendant do? A. Examine or touch the woman again, so as to feel what part of the child presents at the mouth of the womb.

- A. Nothing, but keep the woman in bed, her legs drawn up, a pillow between her thighs, so as to give room for the passage of the child, and to allow its head to rest on delivery.
- Q: What is the difference between the pains when the mouth of the womb and external parts are dilating? A. When the mouth of the womb dilates, the woman feels more excruciating pains, called grinding, rending, and cutting pains. When the external parts dilate, she feels bearing, forcing pains, as if the external parts were bursting.
- Q. What are you to do, when the last pains come on? A. Keep the woman in bed, the right hand against the part called perineum, between the fundament and birth-place; earnestly entreat the woman not to bear down; to amuse herself with talking; lastly, as the head advances, press firmly against the perineum, so as a little to incline the child's head towards the front or pubes, in order to support this perineum.
- Q. What is the difference between the perineum in this stage, and when not distended? A. In a common state, it is about an inch wide; at the passage of the child, it expands greatly, and becomes very thin, so thin, that by hurrying the passage of the child's head, it has been torn, leaving the lower gut and birth-place as one opening.

- 2. How is this to be avoided? A. By not hurrying the labour; by holding the hand against it, so as to support it; by resisting, with the same hand, the passage of the child's head, for one or two pains, if it appear to be coming very fast.
- Q. When the child's head is expelled, what are you to do? A. Let the head lay supported at the side, and do nothing until the pains of the mother expel the body; during the expulsion of which, the hand is to be still kept supporting the perineum.
- 2. After the expulsion of the child, what is to be done?

 A. Remain quiet, after allowing fresh air for it to breathe, until the pulsation of the navel cord has lessened, and the child freely breathes. This is generally sufficient in ten minutes, and then, with any string, the cord is to be tied near the navel, within a short distance, and cut between the knots.
- Q. After the separation of the child, what is next to be done? A. Let the woman remain quiet for a few minutes, then feel her womb through her belly, to see if it is contracting, to expel the after-birth. If it do not contract, the belly is to be gently rubbed, and the navel cord a very little moved, to excite the womb to contraction.
- Q. Are you in any case to pull the after-birth away by the navel cord? A. By no means; as the object is not to take it away; but to make the womb discharge it by its contractions.

- Q: What other means are there for exciting the womb to expel the placenta? A. Turning the woman over on her belly; then introducing the finger to the mouth of the womb, and turning it around its edge, to excite its action; at the same time gently extending the cord, so as to aid in producing the contraction. In strong women, who have not lost blood, they may stand up, leaning the head and body over the operator: lastly, if the after-birth do not come away in one hour, the hand may be introduced in the birth-place, and the fingers extended all around the edge of the womb, to make it contract; and then insinuated between the edges of the after-birth and womb, slowly separating them, if they adhere, as the contraction goes on.
- Q. If there should be an alarming discharge of blood, how would you stop it? A. By applying a cold, wet rag on the belly, and pushing another a little up the birth-place.
- Q. What are the evils of pulling away the after-birth?

 A. The separation being made before the contraction of the blood-vessels, profuse bleeding ensues; and if the adherence be great, the womb may be torn from its connections.
- Q. The after-birth being removed, what next? A. The woman is to be wiped dry, turned or rolled over to the other side of the bed, with a dry cloth at the birth-place; and with fresh air, without a current, is to be left to slumber quietly for a few hours.

Recapitulation of natural labour from Dr. Meriman. Labour is divided into four stages.

First stage, the head of the child passes through the upper brim of the pelvis, and the mouth of the womb dilates the size of a crown.

Second stage produces that change in the position of the head, which turns the forehead into the hollow of the back bone, (os sacrum,) and brings the crown of the head to emerge under the pubes in front.

Third stage produces the expulsion of the child from the external parts.

Fourth stage, the after-birth is delivered.

(Note.) The mouth of the womb opens fully, sometimes in the first stage, at others not till the second stage is over. The time at which the membranes rupture is various. The longer they remain entire, the safer in general is the labour: the most natural being when the waters are not evacuated, till the head of the child is just ready to pass into the world.

Beginning symptoms of labour.

First: general and equal subsidence of the womb and belly; a very favourable symptom.

Second: a discharge of a mucus fluid from the birthplace, called a *shew*, when tinged with blood.

Third: frequent gripes, and desire to evacuate the bowels.

Fourth: a frequent urgency to make water.

Occurrences during labour.

Pains, restlessness, despondency, rigors, vomitings, profuse perspiration.

Pains are true or spurious. The spurious are known by irregular occurrence, by affecting the belly more than the back or sides, and by not opening the mouth of the womb. True pains are known by recurring at regular intervals; by affecting the back, and shooting round to the thighs; by producing a perceptible opening of the mouth of the womb during each pain; and by protruding the bag of waters as a bladder, through the mouth of the womb.

True pains are of two kinds: 1st. grinding, rending, cutting, as the mouth of the womb dilates. 2. Bearing, or forcing pains, after the womb has opened, and the bag of waters, or the head of the child, is forced through the mouth of the womb, and the external parts of the mother.

The restlessness and despondency of women in labour, occur in the early stages, during the grinding pains, generally relieved when the bearing pains come on.

Rigors, or thrillings, often occur during the opening of the mouth of the womb, and when it is completed; sometimes preceding the passage of the head through the external parts; and terminate by producing violent cramp in the lower extremities. These are favourable indications of labour, different from those distinct shivering fits, the forerunners of fever, occurring in long, difficult labours. Vomiting is also a favourable symptom in labour, at the beginning; but should create alarm, when it occurs after a long continuance of labour, the mouth of the womb opened, and pains suspended.

Perspiration is a natural consequence of labour; but artificial perspiration, brought on by heated air, and bed-clothes, or heated liquors, is injurious.

Rules for Management of Natural Labour.

- 1. Natural labour requires but little assistance. The dilatation of the soft parts is effected by the pains, assisted by the bag of waters; of course, no attempts to dilate must be made by the attendant.
- 2. During the first and second stages, the patient may sit, stand, kneel, or walk about, as she pleases; repose occasionally on a bed or couch, but not too long at a time.
- 3. She should be supplied with mild bland nourishment, if desired, in moderate quantities. Tea, coffee, gruel, barley-water, milk and water, lemonade, broths not salted, may be allowed; but beer, wine, spirits in any form should be forbidden, as injurious in the early stages of labour; and only used in small quantities in the last stage, in cases of great exhaustion.
- 4. Bladder and bowels, by all means, to be emptied after introducing the finger into the birth-place.
- 5. Toughing must be resorted to in order to judge of the progress of labour; not too often repeated, and with great care not to break the membranes.

- 6. The spirits of the patient to be kept up by cheerful conversation; not noisy or unpleasant remarks.
- 7. About the end of the second stage, the patient is to lay down; legs drawn to the body; knees opened with a pillow; the attendant to be behind, ready to support the part between the fundament and birth-place, as the head and body pass, to retard it one or two pains, if too rapidly coming.
- 8. After the head passes, allow the pains to expel the body.
- 9. After the child breathes freely, in ten or fifteen minutes, tie the navel cord, one or two inches from the belly, another within four or five inches, and divide the middle, examining as it is done, to prevent cutting improper parts.
- 10. The child being born, secondary pains come on to expel the after-birth: these, generally in less than twenty minutes, expel it in the birth-place, from whence it is extracted easily.

With all these accounts, recapitulations, questions and answers, I do not see how it is possible you can fail understanding the subject of natural labour, so as to direct all needful assistance.

LETTER VIII.

Contents. General remarks—particular charges to attendants on women in labour, to prevent flooding and laceration—the treatment—delivery of after-birth when retained—twins—breech presentment, feet and knees, forehead, face, head and arms—delivered by powers of mother—cases where art is necessary—presentments of arms, shoulder, back, belly, sides, navel cord, &c.—operation—recapitulation—tedious labours on account of the mother—destruction of child—delivery by the lever and forceps—after-birth before the mouth of the womb—convulsions—means of lessening the pains of all labour.

On entering into the subject of the more particular treatment of women at births, I cannot avoid feeling distressed at a survey of the afflictions which so many good mothers have had to encounter; probably as justly attributable to themselves, as to their ignorant attendants. For what excuse can be found for neglecting to procure accurate information of the outlines of the great work of child-bearing, the most interesting operation to which they are subject? Had but small portions of those hours lost on cookery, novel reading, and pretty exhibitions, been devoted to the exercise of common sense, about parturition, there would have been scarcely an evil to encounter. To think that rational beings would consent to expose their lives to the mercy or ignorance of attendants, when they could have felt the se-

curity of certainty, of what treatment was proper, is truly most extraordinary. The more does it deserve to be reprobated, since the moment the woman is in the situation requiring assistance, the ignorance contributes to the alarm; the most indifferent prescriptions are seized, more fatal than catching at straws; they embrace the means which increase their danger.

Of the evils which women have had to encounter at births, those from ignorance about what is necessary to be done, are not an hundredth part so numerous as those from acting in such a way, that a child, understanding how a child was born, would detect and condemn. The serious misfortunes of bursting the external parts, pulling down the womb, alarming floodings, and innumerable mutilations of children, ought not to be so much ascribed to the ignorant attendant, as the negligent woman and her friends. Should a physician offer to relieve a tooth-ache, by cutting off a member of your body, the prescription would be instantly rejected; and yet such a remedy for such a complaint is not more ridiculous, more at war with common sense, than the exercise of those arts, tricks, and follies at births, which bring on the above misfortunes.

From the history of labour, we learn that the object of the slow returning pains was the gradual opening of the parts, for the passage of the contents of the womb. To say nothing of experience, can you fail perceiving that the hurry of the operation must tend to burst the parts? Indeed, for a woman to suffer a midwife, without any cause, to be thrusting her hand up her womb, tugging at the parts, exciting irregular action and irritation; for her to be pre-

vailed on to bear down, forcing, striving, to discharge the child, all show, that she no more exercises her common sense than such officious, meddling midwifes. A contrary treatment, patiently waiting for the involuntary contractions to do the business, and when appearing too rapid, to press with the hand on the distended parts, then so thin, that is, the perineum, so as to support it, (and not to tear it open with her fingers, or slip it off, as some have been known to do,) is the course pointed out by common sense. To guard against this accident, in addition to the above means, the mucus should never be removed from the parts; and when dry, they are to be well oiled.

When the perineum has unfortunately bursted, the parts should be well washed, and freed from any thing that can keep their edges apart. A clyster should immediately be given, if the bowels have not been cleansed before delivery. The thighs should be drawn up, the knees kept close together, the parts at perfect rest; any mild ointment may be applied externally. Sometimes these lacerations have thus healed up, though often otherwise; leaving the excrement perpetually entering in the birth-place.

Slight lacerations of the lips of the birth-place sometimes take place; and large quantities of blood are effused in the part. This is painful, but requires no other treatment than a soft poultice, and cold washing.

Pulling down the womb, and floodings in labour, are produced by as unnatural treatment, as much in violation of common sense, as the bursting of the perineum. Every woman would instantly bleed to death, if, on the separa-

tion of the placenta from the womb, the womb did not contract, so as to stop up the mouths of the large vessels which carried the blood to the after-birth. I repeat, then, the great business is, not to extract the placenta, not to pull at it, (sometimes even the cord has been pulled off, in the abominable exertion,) not to force it away, as has been so generally done, but to excite the womb to contract and expel it. The common sense, therefore, of every woman should tell her, that this pulling away must either pull down the womb, or separate the placenta before the womb contracts, and must produce floodings, and therefore ought not to be submitted to. The means of exciting the womb to action in common cases have been mentioned. should be continued after a pain, the cord gently pulled (again remember, not to pull it away, but to excite the action of the womb;) tastly, the hand may be introduced up the womb, the fingers rubbed against the sides, around the edges of the placenta; lastly, the careful midwife is to insinuate her finger all around its edge, slowly separating it; and with a cold wet rag on the belly; rubbing the belly, pressing gently, and moving about the great ball or mass of the womb, its contraction will be certain. A general rule is never to remain more than two hours without forcing the delivery by the above means. The hand going into the womb, is guided by the navel cord; when the whole is brought away, it should be so turned, or wiped around, as to take up the membranes and clots of blood, which may adhere to the sides, and produce after-pains.

Whenever there is an alarming loss of blood after delivery, cold water is to be applied; a bag of fine ice or snow

has been stuffed up the birth-place, and applied to the belly, with success. You are unhesitatingly to pour on a pitcher of cold water, and inject the coldest iced-water up the birth-place with a common syringe. It is needless to add, that the patient should have fresh air, no heating drinks or cloths; and is to be wiped dry, and moved as little as possible.

If the womb has been detached from its connections above, so as to come out of the birth-place, called *inversion*; ascertained by its descent, and the vacancy in the lower belly, the treatment should be immediately pursued, as recommended in the description of the external parts of generation, to which I refer you.

Next to the charge, that the attendants are not to be allowed to do those things which are found to produce lacerations, floodings, falling down and inversion of the womb, and that they are to do all that common sense points out for prevention; they should be warned not to feel, or finger roughly, the child in the womb. The gentle application of the finger will enable each part to be more easily distinguished. Some midwives have been so rough as to push out the eyes, and destroy the organs of generation of the child, when such parts presented.

The directions you have now had, relate to about ninetyeight cases in the hundred of births, according to accurate records kept of deliveries, at various lying-in hospitals. If you attend only to this proportion of cases, you will do much good indeed. But I would wish you to do more; I would have you to attend to the remaining cases; to form at least, such a knowledge of each varying case, as will enable you to understand the treatment, to direct an attendant, in case of inability to procure a physician to consult with.

But truly, in most of these two cases in the hundred, a physician is not necessary; the powers of the mother, with but little art, are often adequate to disburden the womb of its contents.

You have had accounts only of cases where one child is in the womb, and the head presents, with its occiput or crown, the back fontanelle, with its three edges and three sutures, or seams leading to it. On the belief that you will comply with my entreaty, not to be so ridiculously fanciful as to suppose every varying case will be your own, I proceed to state to you, that there are other cases: cases of twins; and of different parts of the body presenting at the mouth of the womb, particularly of the breech. I commence with twins.

And first, be not alarmed on the discovery of the existence of twins. With proper treatment, the mothers do very well. The directions to be observed, are the same as those given for single births. Dr. Meriman has summed up all the useful information, in the following laconic manner.

"It is seldom possible to ascertain that there are twins, till after the birth of the first child; yet, very rarely, it is known during the first labour, by the membranes of each child being felt at the same time in the birth-place; and sometimes different parts of the two children come down together.

"Each of the twins is commonly smaller than a single child, which occasions often the birth to be rapid; and gives the first idea of the twins. At other times, though it is evident the child be small, and there is room for it to pass; yet the pains, though frequent, do not propel it, as the action is impeded by the child, at the upper part of the womb." After the delivery of the first child, by feeling the belly, the existence of another child may be ascertained. If the womb feel very large, rather than leave the woman in uncertainty, it is advised to introduce the hand in it, and feel for the child. Generally in twin cases, the second child is delivered in an hour after the first, and in a position contrary to that of the first; so that if the first present head foremost, the second is a breech or feet presentment.

"The first child being delivered under the management prescribed for single cases, the question to be resolved is, whether the birth of the second child shall be left to nature, or terminated by art.

"It will hardly be denied, that some time ought to be allowed to recruit the woman's strength, and to give an opportunity for the second labour to come on spontaneously. There are many cases, in which it would be unadvisable to wait so long as four hours, without interference. 1st. When artificial aid was requisite for the first delivery. 2d. When the child presents unnaturally. 3d. When fits

or flooding come on. In either of these cases, the labour is to be finished before four hours."

"The following is an outline of the practice which I have been in the habit of adopting. 1st. When both children presented naturally, and the labour of the first terminated without aid, and without much fatigue to the patient, I wait for the secondary pains; but should these not come on in a reasonable time, (four hours,) I introduce my hand, and rupture the membranes; when, commonly, the second child passes readily through the pelvis. 2dly. If the first labour has been natural, and the second child presents in a wrong direction, I have generally deemed it expedient, with very little delay, to extract it by the feet. 3dly. If the first labour has been unnatural, with but very little delay, the membranes are to be ruptured; and whether the child should be brought down immediately, and delivered by the feet, or not, the attendants must decide. The rules applicable to cases of twins, will equally apply to cases where there are three or more children."

After the delivery of twins, greater care is necessary to prevent the mother's fainting, than in single births: she should not have her head elevated; and in moving, should be rolled over in the bed. It will be more proper to apply a bandage, in these cases, to support the belly. The rules respecting the delivery of the after-birth in these cases, are the same as in other cases.

BREECH PRESENTMENTS.

Cases of the child's presenting with its breech foremost, are not very uncommon; occurring, perhaps, rather more

trequently than twins. The signs of breech presentment are not very certain at the commencement. In general, it may be ascertained by the soft flesh, and globular shape of the presenting part, by the cleft between the buttocks, by the parts of generation, and by the evacuation of the contents of the child's bowels, called *meconium*; which last, however, takes place at other presentments.

The progress of this labour is generally, particularly in the beginning, more slow than presentments of the head. The thighs and feet of the child are drawn up close to its body; and in its passage through the pelvis, the navel cord being compressed, the death of the child is very apt to occur. Delivery in these cases is generally effected by the powers of the mother. At first, while the breech remains above, nothing but patience is necessary; when it passes out of the external parts, the perineum is to be supported with great attention, as it is more apt to burst in these cases, particularly as the heels pass, they are very apt to produce the laceration. As soon as the navel cord appears at the navel, it should be pulled down a little, to lessen the stretching. In this situation, every thing should be done to hurry the delivery, which is consistent with her safety. The compression on the cord soon causes the death of the child, which may be remarked by its convulsive, tremulous motion. The belly should be rubbed, gently pressed, to excite pains. As soon as the arms appear at their shoulder joint, the finger should be introduced over the shoulders of the child, as far as to the bend of the elbow, and then gently depressed, when the fore arm passes readily into the birth-place; the second arm will be more easily extricated. The body of the child is

then to be gently extended, in the direction it appears advancing: not powerfully, as death will be produced by the destruction of the back-bone. When the neck appears, the finger may be pushed up around the mouth of the womb, and moved or rubbed a little against the edge or sides of the cavity, in order to hurry a return of pains. As soon as the mouth can be reached, a finger should be introduced in it, and the chin pulled down, to expedite the birth, at the same time that air may enter its mouth. Strong women may stand up, or kneel, in these cases, to hurry the delivery.

In some cases, the child presents with its breech situated differently from the above; so that the face is towards the pubes, and as the chin may lodge against them, and retard the labour, the attendant should turn the belly of the child to the best direction. When the breech is delivered, and the toes are towards either hip of the mother, the child is in a right direction. But if the toes point to the pubes, or belly of the mother, the head will come in an unfavourable position; and therefore, it will be proper, as soon as the breech is delivered sufficiently, to take hold of the thighs with the two hands, and when the next pain comes on, so to turn the body, or give it such a slight inclination, by guiding it with the hands, as will direct the face towards the mother's spine.

"There is no difficulty in effecting this turn, if it be done prudently and cautiously. Much force is not required; nor is it necessary that the child's belly be turned quite round to the mother's back; an inclination towards the mother's back is all that is wanted.

In cases where the mother has a large, well-formed pelvis, the child may certainly be delivered living; but the chance is very indifferent, when the pelvis is narrow, or any thing occurs to retard delivery. I should recommend, when ever a breech presentment can be ascertained to exist, to send for some experienced hand; or, at all events, the united sound sense of the bystanders must be exerted in defending the perineum of the mother from laceration, and the child from death, by delay in the pelvis. To this I will add, that the efforts to reanimate the child, by blowing down its nostrils, rubbing its skin, bathing in hot water, should be continued two hours at least, as life has been restored in several cases of longer duration.

The next presentments of children at birth, are the knees, and the feet. Sometimes either one foot, or one knee. The knee may be ascertained by its bluntness; the foot by its thickness, the heel, the great toe, shortness of the toes, and their forming nearly an even line.

The treatment in these cases is precisely the same as that of breech presentment. If the child do not present so that its face shall be towards the back of the mother, its body is to be a little inclined towards it, as soon as the breech is delivered. The navel cord is to be guarded from extension, and the birth, after the navel passes, to be hurried as much as possible; though all these cases are to be left to nature, until the navel passes. In these cases, the greatest possible care is to be taken not to burst the bag of waters, which will hinder the dilatation, so particularly requisite in such presentments.

You have now the history of the births upon a fair ave-

rage of four thousand nine hundred and ninety cases in the 5000. You perceive the offices to be performed by attendants, in all these cases, amount to almost nothing; chiefly to not breaking the membranes; applying the hand to the perineum, to support it; and, in possibly one case in a thousand, inclining the body a little round, so as to turn the face towards the back of the mother, when, as so rarely happens, the toes are towards the belly of the mother; and lastly, in hurrying the labour, when the navel is delivered, by telling the mother to bear down; by rubbing the belly, and by a gentle pulling of the body in the direction it advances.

Although I consider any further detail to you on the subject of midwifery, as unnecessary for any useful purposes; yet as it may tend to gratify curiosity, and possibly be a subject of reference by some practising midwife, I proceed to state the remainder of the cases occurring.

It is probable that there is not one part of the infant's body which has not, at some time or other, presented at the mouth of the womb for delivery. The rules to be observed, in such cases, I shall continue to extract from Dr. Merriman.

"The irregular presentations of the head are, when the forehead is towards the pubes, or belly of the mother; when the face presents; when a hand or arm enters the pelvis with the head.

1. " The most common of the wrong head presentations is, that of the forehead to the pubes. It is seldom discov-

ered at the first examination; the labour continuing longer than usual, the attendant makes a more accurate examination, and discovers the presenting part is not so conical at the union of the pubes in front; the bones do not ride one over the other; the scalp does not form into a cushion; the hollow of the sacrum is not so filled up by the head; the front fontanelle, with its square shape, and four seams or sutures, at each corner, may be felt. Nature, in general, particularly in those of large pelvis, will deliver in this presentment; but there will be danger of laceration of the perineum, and the labour will be tedious; all will be prevented, if the attendant will apply the fingers to the side of the forehead of the child, and carefully press the fontanelle from the thigh bone, it approaches, a little around, to the side or edge of the sacrum, whereby the crown of the child's head (occiput) is brought under the pubes in front, and the delivery is safely effected by nature.

- 2. "The presentation of the face is distinguished, by the general inequality of the presenting part, by the eyes, nose, mouth, and chin; the chin, in these cases, is towards the front of the pubes. These cases are generally to be left to nature; the bones not yielding, the labour will be tedious; the children generally born alive, but the features of the face are amazingly distorted, and require several days of rest for recovery.
- 3. "When, with the head, one arm presents, nature generally performs the work but slowly. This irregularity occurs chiefly in those of wide pelvis. If it be only the fingers or hand, coming down in a flattened shape, by the

side of the head, the difficulty will not be very great; if the elbow be the part, its fore arm bent on the upper arm, the difficulty will be increased; and still more, if the hand and arm have descended before the head, the head resting upon the arm at the elbow.

"Occasionally the operator may with the fingers prevent the hand or arm from descending below the brim of the pelvis, till the head progresses so low, as to be clear of the impediment; but in attempting this, if the operator bring the arm down lower, or force the head back, no good, but great danger will be done. It will be very practicable to push back the hand with a finger, without pushing back the head, or pulling out the arm. The arm, in these cases, in general is much tumefied, but in a few days recovers itself.

"In these cases unusual care must be taken to keep the patient calm, free from fever, cool, not sweating under hot clothes, and guarding against fatigue in vain attempts to force the child, before the parts are properly prepared to let it pass; opening occasionally her bowels with laxatives; and never allowing the urine to remain in the bladder; to which, in these cases, it is particularly inclined.

"The next presentations are, first, those of the superior extremities; second, the back, belly, or sides; and third, the navel cord. These cases are only to be ascertained by feeling up the birth-place.

"If, on an examination, the mouth of the womb be dilated, and the child cannot be felt; if the waters be evatuated, and the child out of reach of the finger, the probability is increased of an unnatural case.

1. "The most difficult cases are those of the superior extremities; for, whether the part be the hand, elbow, shoulders, or both hands, it is impossible for the child to be delivered without being turned; and delivered as a footling case. The established practice is for the operator to pass the hand in the womb, to take hold of a foot, both if practicable, and bring them down to the external parts, and conduct the delivery as if it had occurred naturally.

"The rules, in these cases, are, first to let the bag of waters dilate the parts. As soon as the mouth of the womb is sufficiently opened, or the waters evacuated, the attendant is gradually to dilate the external parts, till they make no further resistance to the passage of the hand. Then slowly carrying his hand through the birth-place and mouth of the womb, in the absence of a pain, he must (if they have not been opened) rupture the membranes, by pressing a finger firmly against them, when the hand will come in contact with the limbs of the child; the hand is then to pass forwards till it reaches the feet, which are to be drawn along the belly, not over the back of the child; proceeding slowly, still in the absence of a pain, it will be found, as the feet are brought lower, the arm will be retracted; and lastly, when brought down, that the case is become as a foot or breech presentment; of which it must be particularly remembered, to turn the feet towards the sides of the mother, in order that the face may pass at her back. These are the safest cases; generally

the waters are evecuated before the hand is introduced to prevent their passage; and the womb contracts around the child, so as to make great resistance to the introduction of the hand. In such cases, and when the mouth of the womb is not dilated, the patient ought to be blooded freely, if she can bear it, to lessen the contraction; and immediately after, (the better if fainting exists,) the mouth of the womb is to be dilated, and the hand insinuated as above. Lastly, when the action of the womb is so violent, as to make great resistance to the hand, it has been advised to wait, till the pain exhausts its powers. Dr. Hamilton prefers doing this, by administering eighty drops of laudanum. I would always advise free bleeding and bathing the parts, in large quantities of sweet oil, or melted hog's lard, and to keep warm wet cloths around the parts, to be often wrung out of warm water; if not, to bathe the whole person in warm water, sufficiently long to produce a general relaxation.

- 2. "The next presentation is that of the back, belly, and sides. In these rare cases, the child often spontaneously turns into a breech presentment. When it does not, the introduction of the hand is necessary, to bring down the feet.
- 3. "The presentment of the navel cord. In these cases the cord falls down, before the child, and is compressed, so that the death of the child is generally the consequence. When the pulsation of the cord ceases, the child is generally dead. Sometimes the cord has been slipped back out of the way of compression. If this cannot be done, and the child be living, after the part of the

child is engaged in the brim of the pelvis, the labour is to be hurried, by letting the woman stand up, by rubbing the belly, and by bearing down.

In order to impress on your minds the more what has been said respecting the mechanical knowledge, and operations of labour, I recapitulate.

First, If the after-birth be not delivered in about an hour and a half, after the use of the gentle means first suggested, the hand is to be introduced into the womb; the fingers to touch and move against the sides; then the placenta to be separated slowly, and brought away during the contraction of the womb.

- 2. "In cases of twins, nothing extraordinary is required in common; if the second child be detained four hours, delivery to be forced as directed.
- 3. "In breech presentments, the beginning to be left to nature: the presentment to be ascertained by the feel, the cleft between the buttocks, and the parts of generation, and discharge of contents of the bowels. When the heels pass, great care is to be taken to support the perineum; the slower the labour so far, the better; then as the body passes, pull a little the cord; moderately extend the child, not so as to destroy its back and neck; rub the belly occasionally; let the woman bear down; let her stand up, leaning forward, that an attendant may properly support the child; when the arms appear at their origin, to pull them down gently; rub the finger around the edge or the mouth of the womb, to excite it to contraction; lastly, when the child's mouth ap-

proaches, introduce the finger, and pull down a little; as soon as delivery, the woman to lie down, the child so supported as not to be injured; air to be blown in its nostrils, if not breathing; the cord to be cut; the skin to be rubbed, and every attempt made, and long continued, to reanimate the body.

The standing up of the woman, as above, will probably hurry the birth with sufficient rapidity; and I would particularly charge, that the child be so supported in its passage, as not to be endangered by the position; its weight, properly directed, must have a considerable effect in expediting the birth.

- 4. When the feet present, to be ascertained by the heel, the shortness of the toes, their straight edge, &c.; and when the knees present, to be ascertained by the bluntness of the angle they form; or when one foot, or one knee presents, the delivery to be effected as in breech cases, toes turned towards the thighs, on the passage of the breech.
- 5. When the forehead presents, ascertained by feeling the front, or square opening, or fontanelle, with its four seams or sutures, and the cavity in the back or hollow of the sacrum, to apply the fingers to the side of the forehead, and turn or incline it around from the thigh bone of the mother, towards the edge or side of her back bone, or sacrum, where it unites to the hip bones, so that the presentation becomes natural, which it often does, even without assistance.
 - 6. When the face presents, to leave to nature, preserving the powers of the mother, without excitement or molestation, as cool and comfortable as possible.

- 7. When the hand or arm presents with the head, to endeavour, without pushing up the head, to push back the arm, (never to pull it forwards,) and, if not successful, still leave to nature.
- 8. When one or two arms, the back, shoulder, belly, or breast, present, as soon as ascertained, and the membranes have opened the mouth of the womb, slowly introduce the hand, search for the feet, bring them down over the child's belly, thereby making a feet or breech presentment. When the womb contracts so violently as to make great resistance to the entrance of the hand, the woman to be blooded freely, bathed around the body with sweet oil, fomentations of warm cloths to the belly, or general warm bath, to produce relaxation. Lastly, a large dose of laudanum, not exceeding eighty drops.
- 9. When then avel cord presents, if early discovered, sometimes it may be so pushed back, as to lessen its compression. The delivery to be hurried, to save the child, but not so as to lacerate the mother. The shortness of the navel cord is also sometimes an impediment to delivery: art does not here promise much: the cord has been cut, and the child died: the after birth generally comes with the child.

You must believe that there is nothing in these uncommon cases, which a woman of good sound sense, cool, composed, not in a hurry, could not perform. I would, in full confidence, trust to any such, especially if directed by a by-stander, in what manner to proceed, and directing from established, written rules. Nevertheless, where no such confidence exists, I would advise an application to a

physician, whenever there are rational grounds for believing the labour will be tedious or difficult.

I have now stated the difficulties at births, arising from the bad presentation of the child. These are, probably, not more than one half of the difficulties attendant upon child delivery. The powers of the mother are as liable to irregularity as the presentation of the child. Probably in confined manufacturing countries, the bad presentation of the child is not so frequent an occurrence as the mal-formation and disease of the mother.

The first impediment I shall mention to births, on the part of the mother, is the bad formation of the pelvis, a most rare occurrence indeed, in all countries like the United States, where children are brought up without that confinement, which destroys their vigour and make. The chief defect in the formation of the pelvis, is the projection of the back-bone too far forward, that is, near the front or pubes. The extent is ascertained by introducing the finger near the pubes, and moving it back to the most projecting part of the back-bone; care being taken not to move it downwards, in the hollow of the sacrum. By this mode, it may be ascertained if the opening be three inches wide; such are the powers of the mother, that often through a lesser opening, of two and a half inches, children are born. When the presentment of the child is natural in cases where the pelvis is found small, the rule is to let the labour progress, as long as the powers of the mother exist in good state; but if no progress be made in the labour, that is, if the child do not descend at all in the pelvis, if the labour have continued, so that the mother's strength is greatly impaired: lastly, if after consultation with the best professional advisers, it be determined impossible to deliver the child living, the only object is the safety of the mother: the child is to be brought away by pieces.

The instrument for doing this is called the crotchet or perforating scissors. Dr. Bard's account of using them is annexed, as a subject of reference.

" After a solemn and serious consultation, the operation being determined on, the woman is to be placed on her back; the fingers of the left hand being introduced into the birth-place, and fixed on the presenting part of the child's head, (be sure the mouth of the womb is sufficiently opened,) the scissors made for the purpose, are then pushed through the palm of the hand, and between the fingers, and piercing the scalp to the skull, the bones are perforated by a boring motion, until the fingers reach the stops on their edge;" (a much better plan is, when the sutures, or a fontanelle can be felt, to introduce the scissors through them, and destroy the organization of the brain;) "the scissors are, when introduced, to be opened in one direction, turning them half round, (the joints guarded by the fingers of the left hand,) they are to be closed, and opened again in the opposite direction; and again turned round, so as to destroy the texture of the brain: then being closed with the same care not to entangle any of the soft parts of the mother, they may be withdrawn. Some time is now to be allowed for the woman to rest; and for the pains, if they still continue, to produce their effect, in discharging the brain, and lessening the diameter of the head.

"This being effected, we next endeavour to remove any rugged edges of bone which might injure the mother; and then passing one or two fingers within the skull, and taking hold at the edges of the perforation, we may endeavour, in that way, to assist the pains in forwarding the birth. But in a necessary and justifiable case, we shall be able to make but little progress in this way; and we shall find it necessary again to fix the fingers of the left hand over the opening in the skull, and between them to introduce the crotchet within; then fixing the point on some of the bones; with the left hand so placed within the vagina, and the fingers so spread on the child's head, as that the point of the instrument, should it slip, will rather strike the palm or fingers, than the parts of the mother; we exert as much force, gradually increasing it in extracting, as the parts will bear: and should they give way, the instrument is to be fixed again on another part, or on the outside of the head, in the eye, under the jaw, or behind the ear; and varying the direction of the extracting force, as far back as possible, from side to side, or directly forward, endeavour to bring the head through the contracted pelvis. If we again fail, both hooks may be fixed, one on each side of the head, by which as much force may be exerted, as can be necessary, or as the parts will bear: nor is it easy to conceive how much force, or how tedious and fatiguing an exertion is sometimes required. All, however, is to be done deliberately, slowly, and cautiously; resting ourselves, and allowing the patient to rest, and, from time to time, to receive some mild cordial nourishment: haste is seldom necessary, and although we may wish the delivery accomplished as soon as possible, we must never be hurried."

"Having delivered the head, a cloth is to be wrapped round it, or a handkerchief round the neck; by which we may make use of as much force as we dare, without risking the separation of the neck from the trunk. And if even with this we do not succeed to bring down the shoulders and breast, which in a very narrow pelvis will sometimes be the case, we are again compelled to have recourse to the perforator, to fix it in the arm pits, or to tear open the chest, or the abdomen, when swelled in consequence of putrefaction; which, in a child long dead, is frequently the case.

"This, as well as that in which the child's head may be enlarged by disease, particularly the hydrocephalus, are cases in which the perforator may be required, even in a woman with a well-formed pelvis. The hydrocephalus may be suspected, when in the beginning of labour the child's head readily recedes from the touch, floating as it were back in the waters of the womb; or where, in a well-formed pelvis, the head remains a long time above the brim without engaging in it, notwithstanding active pains; and at the same time, we can discover the sutures and fontanelles very largely open, and the bones very easily moved on each other. Yet so much uncertainty always attends this conjecture, even in a person of considerable experience, that it becomes our duty to wait as long as the pains continue regular, and the woman's strength be not greatly impaired.

"It will generally happen, that the expediency of introducing the hand, and delivering the feet, with the hope of saving the child, will occur before we have recourse to the last remedy: this will put it in our power to examine carefully the nature of the case, and to ascertain what it is which obstructs the labour. If the head be not found very large, nor the pelvis very narrow, it may be proper to proceed, and deliver by the feet; but if the head be found swelled very large, the chance of saving the child will be so little, and perforating the head, in this case, so easy and safe, that that may be most justifiable. The perforation in this case is generally all that is necessary; as soon as the waters shall be discharged, the head will collapse, and the labour may then be left to nature.

"The death of the child, when that can be ascertained, removes every objection to the use of the crotchet, when otherwise necessary. But of this there is but one real evidence; that is the separation of the skin from those parts of the child, which can be felt. Neither coldness of the abdomen, disappearance of the milk, cessation of motion for any length of time, nor even putrid and offensive discharges from the womb, are to be depended on. But the peeling off of the scarf-skin is unequivocal, and is sometimes attended with such a distension of the cavities from extricated air, as to render it necessary to open them before the child can be born; and for this purpose the scissors and crotchet are the most convenient instruments."

But a great cause of difficult and tedious labours with mothers, is found, not in the bones, but in the womb; it sometimes does not act; it acts irregularly; its mouth will not dilate; its mouth is also subject to displacement. The remote cause of these irregularities is most generally an inflammatory state of the system; marked by too violent action in the beginning of labour, sometimes by a prostration of the animal powers. Relief is had by free bleeding, even when the pulse is weak, if the person be of a strong, healthy make. In these cases a physician should attend, to judge of the power of the patient, and direct when delivery is to be forced. Constant attention must be paid to emptying the bowels and bladder in all tedious cases.

CAUSES OF TEDIOUS LABOURS.

The first cause I shall mention of tedious labours is, the refusal of the mouth of the womb to dilate; it remains rigid, as will appear from feeling it. The remedy most universally successful, is free bleeding, sometimes as much as forty ounces. A vomit has been often given with success. Filling up the birth-place with a large quantity of sweet oil, keeping the oil in by a plug of cork surrounded by a rag, will be of great service. Sitting over the steam of hot water is also beneficial. There is probably no case, in which these remedies, properly applied, would not relieve. These labours last sometimes many hours; diet to be very low, and exercise taken freely, though not to fatigue.

The next cause of tedious labour, is, the refusal of the body of the womb to contract regularly; the pains are

irregular, but there is no contraction of the mouth of the womb; bleeding in these cases is proper. Professor James, of Philadelphia, says, "from the repeated trials of the effects of spurred rye, (called ergot) that, when the soft parts concerned in labour are dilated to render the interior action more perfect, a dose of one scruple of this medicine, finely powdered, should be given, suspended in a little molasses and water; that the dose may be repeated in half an hour, if the interior contractions are not energetic; that he never found occasion to give a third dose." This is a most important discovery; the medicine ought to be in every midwife's hands. I suppose it will nearly supersede the use of the forceps, for hurrying the birth. Nevertheless, as cases may occur in which it may not be safe to trust to this medicine, I extract the following account of the manner of using them.

The forceps are made of two blades, corresponding to two levers, of shape and make as may be seen by reference to them in physicians' hands. The one part separates from the other; and this one part, called a lever, in most cases, answers as well for hurrying the delivery, as the two united, called the forceps. The manner of using each is as follows: after giving a clyster, and being certain that there is no urine in the bladder, by introducing the catheter.

The best position for the woman to lie, is on her left side, the posteriors near the edge of the bed. The operator is to introduce the fore finger of the right hand to the child's ear; then holding the blade or lever in his left hand, he is, under his finger, which is his guide, to push it

slowly over the ear, till the claw of the blade is at the edge of the birth-place. The introduction of the blade will probably renew the pains, of which advantage is to be taken, by using the blade during the pains, and desisting during their intermission. The manner of acting is to hold the left hand on the blade, close to the birth-place, and with the right hand to raise the handle of the instrument slowly, but firmly; so that while the part held down with the left hand, keeps it fixed, the other end presses the child's head downwards, in the hollow of the sacrum, and thereby ends in the expulsion; when there are no pains, we are to imitate them, by acting and resting alternately. The head soon begins to descend, and distend the perineum, which is to be supported by an assistant.

When, instead of this blade or lever, the forceps are to be used, after the introduction of the first blade above, the second is to be introduced with equal care below, precisely opposite to the first. Should the opposite ear not be felt, the direction of the blade must be by the position of the first.

Both blades being most slowly introduced, the claws are to be brought together and locked, care being taken not to entangle any of the hair, or soft parts, and the lock.

If, on endeavouring to lock the forceps, the handles do not come near together, or are very far apart, or are close together, the points of the blades are not properly fixed; the last one should be extracted, and more carefully fixed.

The forceps being so fixed as to enclose the head of the child, the handles being held in both hands, they are to be moved from handle to handle, or upwards and downwards, or from ear to ear; because, if moved from side to side, or face to crown, they will slip off. The most gentle force only is to be used. Dr. Meriman observes, "when acting with the forceps, the force at first used should be very moderate, but is to be increased as occasion may require;" yet if the head advances at all, however slowly, with the force first applied, it need not be increased; for as Dr. Denman truly remarked, "a small degree of force, continued for a long time, will be equal to a greater force hastily exerted; and with infinite less detriment either to mother or child."

In concluding this short sketch of the use of instruments, so terrible to so many ladies in imagination, I would remind you of the folly of such fears. What are these mighty instruments? a pair of scissors, to cut as they open, dignified with the name of perforator, as harmless to the mother in this operation, as proper to be used, when the child cannot be born living, or is dead. And what are the forceps? a pair of large pincers! one blade, when used alone, dignified with the name of lever. And as to their use, a source of no pain to mother or child, requiring not more sense for fixing them over the ears of the child, so as to compress its head equally, and not injure the mother, than the application of a pair of pincers to pull out some body from a mass which a little surrounds or envelops it. Taking this fair view of the subject, I think that although not one in half a million may have to submit to the operation, all ought to view it as a simple affair, without any terror;

really not so dangerous or painful as the extraction of a tooth.

I now come to the third cause of tedious labours. It is when the mouth of the womb is turned towards one side of the woman; or thrown backwards to the back of the pelvis, so as nearly to reach the sacrum; or thrown forwards over the pubes.

Laying on the opposite side will change the leaning of the mouth of the womb.

When the mouth is turned backwards, (which occurs sometimes with those of very pendulous bellies,) it is recommended to lay on the back, the hips elevated; and it may prove of service to support or push towards the back bone or spine, the top of the womb, it being the part nearest the stomach. The fact of this inclining backwards of the mouth of the womb, will be ascertained by introducing the finger up the birth-place, and finding the mouth of the womb not in its proper place, but pushed away backwards, scarcely in reach of the finger. In these cases, the head enters the pelvis, the part nearest the pubes being covered with the front of the womb, which has been mistaken for the child's head, without hair. The delivery requires patience, and no interference.

The bending of the mouth of the womb forwards to the pubes, has been questioned; if it ever so incline, the treatment is to leave to nature.

Before concluding the subject of delivery, I will remark

two cases of most rare occurrence, and attended with great danger.

The first is, when the after-birth adheres to the mouth of the womb; and at its dilatation, bleeds freely. By the introduction of the finger, the orifice of the womb will be felt dilating during a pain. The practice recommended in these cases, is to introduce the hand, gradually dilating the parts, to push it through the body of the after-birth, feel for the feet of the child, and deliver with as much rapidity as in footling cases; as is practicable without bursting the parts of the mother. Although I never had such a case, I would strongly recommend in preference, two doses of the ergot, the one half an hour after the other; at the same time introducing up the birth-place a strong solution of sugar of lead, the buttocks elevated, a tight plug in the birth-place, then to cover the external parts with the hand, firmly pressing to prevent the escape of blood, until the head of the child advances. So long as the womb contracts, no blood can flow, if you will prevent its passage externally, which I am sure, by hands to relieve each other, may be done till the ergot operates. When there are no pains, then turning, and delivery by the feet, is the only resource.

The second case is attended with convulsions. These often arise from irritating matter in the bowels. The remedy is bleeding most freely; at the same time, pour down the throat either ten or fifteen grains of calomel, or any other purgative medicine. In addition, a solution of a spoonful of salts ought to be given; also a clyster every two hours, until the purging is free. When the stools are of-

fensive, their irritating nature will be greatly lessened by giving the patient a tea-spoonful of chalk, or half as much salt of tartar, or what is nearly the same, a table spoonful of common strong ley, every two hours, either mixed in milk or water. When the head of the child is low in the pelvis, it is advised to hurry the delivery with the forceps.

My solicitude to make one and all of you acquainted with the history of child-bearing, induces me to add an account of some cases which may occur in every family, as well as the offices performed by attendants. The perusal must make you more familiar with the subject, and the better enable you to assist some suffering woman, or even to direct the performance of services to yourselves.

Case 1. Mrs. A. was taken in labour with her first child. She had indulged in excessive fears, increased by the accounts her attendants and companions gave of dreadful accidents they heard of at other births. She was convinced that her situation was deplorable, that the birth would end in her death. Her pains, extending around her back and belly, were at regular intervals. The midwife was sent for, and in obedience to her fears also, a man attendant, to be ready in case of accident. When the midwife arrived, she requested the patient to lay on her left side; and having her nails closely cut, without any ointment, introduced up the birth-place the fore-finger of her right hand; at first near the pubes or front bones, then extended it backwards towards the back bone, called sacrum, from which she perceived at once, there was a considerable space, abundant for the passage of any common

child. She kept her hand in the birth-place or vagina, until a pain came on, and then, with perfect gentleness, extended her finger towards the middle, to the mouth of the womb. She found that the orifice had opened a little, that it was on the stretch during the pains or contractions of the womb; she felt a small presenting part of the membranous bag containing the waters; and desisting from pushing, lest her finger might burst the bag, she withdrew it a short distance, preserving it at ease in the birth-place, until the pain had subsided. When this was ended, she moved her finger around, and felt the hard head of the child, but could not of course perceive the hair of its head. Though it were possible for her to be mistaken, yet she affirmed that it was the head, and told her patient that all was right; that her case was very favourable. The midwife next charged her to evacuate her urine whenever she felt the least inclination; and had an injection of warm water given to open her bowels; which speedily had the effect. The pains returned at regular intervals, increasing in frequency as the labour came to a close. As the mouth of the womb was opening, the woman said she felt as if cut open with a knife, so excruciating were the pains. The bag of waters protruding through and dilating the part, at every point, the head soon descended. In this state, during every pain, the bag or membranous covering was much distended, feeling as a bladder ready to burst. When the pain was over, the waters receded, the bag became flaccid, and it was very practicable to feel the round crown of the head of the child, the soft part in its skull called fontanelle, and the pulsation of an artery in its head; which proved that it was living. Presently the pains became more frequent, the head of the child perceptibly descending, when the patient was improperly alarmed at a gush of water

escaping from the birth-place, which arose from the timely bursting of the membranes: now the external parts began to distend, the head being in the birth-place, the pains being more frequent, the head would descend almost to the external parts, and when the pain ceased, would go back considerably. The midwife saw that this was the critical time, and kept the patient on the bed, on her left side, her knees drawn half way up to the belly, and a pillow between them; also large cloths underneath her, to preserve the bed. In this situation she sat at her side, her right hand applied so as to cover the part called the perineum, (being between the fundament and birth-place, now very thin, and spread so as to appear four or five times as wide as common.) On this equally, she kept her hand, to prevent the too rapid expulsion of the child; and when the head was advancing, held her hand pressed against it, so as to push or incline the head towards the pubes, or front of the woman. Being the first birth, she thought the child might tear the perineum in its passage, therefore held her hand so as to resist altogether the exit of the head during two pains, so that the parts had better time to dilate. In this stage, she took unusual pains to direct the attention of the womán from bearing down, or holding in her breath, inducing her to talk all the time. At last the head passed into the world, the face towards the mother's back or fundament: the midwife all the time keeping her hand on the part until the pains of the woman expelled the buttocks of the child. After the head passed, an additional quantity of water escaped, it being squeezed out by a pain, which in a few seconds returned. The head of the child was supported by her left hand, until the expulsion of the body, which was completed in two minutes: care was taken from the first

appearance of the mouth, that air should freely be admitted, as also that the navel cord was not compressed. About six minutes after the delivery, the child crying loudly, and the pulsation of the cord lessening, she tied a string once around it, about two inches from the navel, then another string towards the mother, within two inches of the first, then cut the navel cord between the two knots, with a pair of scissors. In about ten minutes after the delivery, the happy feelings of the mother began to cease: she felt the pains returning. The womb still contracted: it was felt as a large ball over the pubes; the after-birth made its appearance at the birth-place; and with considerable clots of blood, was taken away, and put in a pot for the purpose of burial or burning. The patient was kept unmoved during this operation; and about ten minutes after, her bottom was raised a few inches, the wettest cloths pulled away, and dry ones put under; and then she was wiped as dry and clean as practicable, without any exposure to the cold air: here she continued about an hour. After this, without raising her head, she was rolled over to the other side of the bed, a small bundle of rags put at the edge of the birthplace, and a sheet folded up and pushed under her bottom, where she was left to repose,

The only drink taken from the beginning to the end was cold water, and weak cold tea. The midwife had only to introduce her fingers from time to time, and always most gently. She had not her hand thirty minutes on the perineum to prevent its tearing; and excepting the tying the navel cord, and guarding against pressure on it, keeping the child's mouth exposed to pure air, she did nothing, except prevail on the patient to be quiet, and not disturb

the operations of nature, by using her powers in bearing down. As soon as the navel cord was cut, the child was handed to a nurse, who kept it in her lap, covered, excepting its mouth, in a warm cloth. As soon as warm water could be got ready, it was put in a tub and washed, then dressed in light clothes, so that its limbs could move. In six hours it was applied to the breast.

This case, conducted by a sensible midwife, is pretty much the history of ninety-nine cases out of the hundred, of common deliveries. The offices, required in such cases, surely no woman can hesitate in admitting, may well be performed by the most ignorant servant in the family. The only office is keeping the hand against the perineum, which might safely be dispensed with, if the mother would be sure not to bear down to hurry the birth.

Case 2. Mrs. B. was in labour with her third child. The midwife not being properly instructed, with too much violence pushed her fingers, during a pain, so that it burst the membranes, and the waters were discharged, before they had assisted in dilating the parts. The birth was, in consequence, attended with more pain, but in other respects terminated favourably; excepting that the bowels not being evacuated, at the birth of the head of the child, considerable quantity of excrement was expelled.

Case 3. Mrs. C. in labour with the second child, took an injection, as all ought to do in that situation. The membranes burst in proper time, and the child was born without any accident. But there was considerable delay in the delivery of the after-birth, which excited some un-

easiness. The ball of the womb was felt in the belly; the midwife moved it about; at last she introduced the finger, and turned it around the edge of the womb, which produced a return of pains; as the pain came on, she gently extended the cord, and the whole came down into the birth-place; she then received it, turning it round, so as to wipe up, and bring along the membranes.

The following cases from Dr. Bard, I annex, as they more fully explain the treatment for the inversion of the womb, than I have done in the account of it. They will, at least, serve to remind you of the folly of pulling away the after-birth with violence; and the impropriety of women standing up at delivery, excepting where indispensably necessary to save the child.

Case 4. "A lady, very tall, after a labour rather tedious and severe, was at last, by one long and severe pain, delivered of her second child. On tying the navel string, I observed it to be remakably thick, and very short, and on taking hold of it between my thumb and finger, (for I could not twist it round my finger,) I perceived, as I thought, the placenta to be descending; not however by successive pains, but by one interrupted descent, until it was thrown out of the vagina; and to my very great astonishment, with it came the whole volume of the womb. It is not easy to express my feelings at this moment; still, however, I commanded so much presence of mind as neither to lose my time nor alarm my patient. The placenta, which was already in part separated, was immediately detached; and my fingers being applied to the fundus of the

womb, it was immediately and completely reverted; the hand and arm being introduced as high as the elbow, then slowly withdrawn. No flooding or other ill consequence ensued, and the patient speedily recovered. It was seven years before this lady became again pregnant; her labour was then natural and happy; she has since had a fourth child, and now enjoys good health."

Case 5. "The gentleman who communicates this case to me, found the patient in the very last stage of labour; standing, supported by her friends, in a very awkward posture, between upright and recumbent. The child was born in this posture, immediately after he entered the room; the navel string was wound round the neck, and the greater part of the placenta protruded the external orifice, slightly adhering to the fundus of the womb, which was found very low down in the vagina: no flooding ensued. The case being perfectly new to the physician, he contented himself with gently pushing up the fundus as high as he could with his fingers; and ordering himself to be sent for in case of flooding or any unusual occurrence, he went home to reflect upon it. In about eight or ten hours, the husband called on him in great agitation, and informed him, that a substance as large as an ox's bladder blown up, had come out of the vagina. In this situation he found his patient, with very little hæmorrhage, but very faint, and a pulse not to be felt at the wrists. He immediately grasped the womb with both hands, and compressed it until he could grasp it with one, then, with the fingers of the other, he pushed the fundus through the external and internal orifices, pursuing it until he had restored it to its natural situation; and letting his hand remain until the

womb contracted about it, then gently withdrew it. The faintness immediately went off, the pulse returned, and the patient had a quick and good getting up. It is now nine years since this happened, the woman has enjoyed good health, her menstruation has been regular and moderate, but she has never since been pregnant.

Case 6. "A lady, after a labour rather severe, was delivered of her first child; the placenta did not follow in less than two hours, and was then delivered with so much pain, that, from that circumstance, as well as from what followed, there is reason to believe much mismanagement occurred. For some time before the delivery, a suppression of urine took place, which continued unrelieved above three days; during all which time, in addition to much pain, she complained of a continual nisus, as if something was to come away. On the fourth day, while sitting on the pan, and endeavouring to pass her urine, the whole womb was suddenly thrown out of the vagina. It was eight or ten hours before medical assistance could be procured; but in the mean time, the nurse, a prudent and experienced woman, grasped the womb, and endeavoured to replace it; and actually saved the patient's life, by preventing the midwife from rudely attempting to bring it away; which she insisted on doing, asserting it to be a part of the placenta left behind. By the time the physician arrived, the nurse had so far succeeded as to replace the womb within the vagina; the urine was immediately drawn off by the catheter, but it was then found to be impossible to revert the womb. For upwards of thirty years, this lady remained subject to profuse hæmorrhages, and consequently endured a very feeble state of health, but has

survived until the menses have ceased, and now enjoys a perfect state of health."

Case 7. " A lady, after a labour in all respects perfectly natural, was delivered of her fourth child on Sunday. The gentleman who attended, assured me, that no force was applied to the navel string, but that the placenta was delivered by the natural pains; on examining after the deliverance, he discovered a tumour in the vagina, the nature of which did not immediately occur to him; a slight convulsion and a considerable bleeding ensued, but soon ceased. Apprehensive of renewing the bleeding, no further examination was made, and the lady was put to bed, apparently as well as she usually had been. The usual after-pains followed; in addition to which, on Tuesday night she complained of much uneasiness, and a feeling, as she expressed, as if something wanted to come away: and on Wednesday morning, after a throe a little more severe, the womb was protruded from the vagina, as large as a pint decanter; and resisted every attempt that was made to replace it. I saw the patient at noon of the same day, after which, such attempts as were thought justifiable, were again made to revert the womb, and persisted in above an hour, in all the variety that could be devised,but without any sensible effect. An emollient fomentation was then directed, and the protruded womb was ordered to be covered with a piece of fine linen, spread with simple ointment, (sweet oil is best,) and to be suspended by a bandage; the bowels to be kept open, the bladder empty, and every means to avoid inflammation to be strictly pursued. After this, two women, who both professed to have seen and relieved similar cases, were successively applied

to; and both appeared to have treated the complaint very properly, with soft emollient applications; and the last particularly, to have persevered with great attention and tenderness. Under this management, the protruded womb gradually diminished in size, and after seven or eight days, that is, on the Tuesday or Wednesday following, with very little assistance, was suddenly retracted from the hand into the vagina.

OF LESSENING THE PAINS OF LABOUR.

I come now to the means of lessening the pains of labour. The first point I wish to impress on your minds, is, that labour being an operation in which the whole system is greatly concerned, the main object is to preserve the general health. I have already told you, that washing and rubbing the skin, especially in parts where there is great secretion; that a plain, simple diet, regularly taken, with exercise in open air, are indispensable requisites for health. You are already apprised, that the confined contents of the bowels generate such stimulating, offensive air, as to distend, and excite to diseased action the womb and neighbouring parts, all effectually prevented by daily evacuating the bowels at the same hour. I state it as an incontrovertible truth, that almost universally the woman who preserves her health by diet, exercise and cleanliness, instead of by physic, will have infinitely the best time in child-bed.

It has been urged, that a free use of sweet oil in diet, tends to lessen the pains of labour. I have seen cases where many believed it to have this effect. Its free use in bathing the belly, and around the thighs, in injecting it, and retaining it up the birth-place, as labour advances, certainly tends to lessen considerably the painful irritation and distension.

But of greater efficacy, of greater certainty, I recommend the loss of blood, when labour commences. It has been recommended by the ablest physicians in this country. I have never seen a person who resorted to it, who failed having an obvious mitigation of suffering. Abundant diet, the high action of the system, converting the fat into blood, give sufficient reason for its universal use, excepting in those enfeebled by disease. In addition to lessening the pains of labour, it lessens the diseases apt to follow. It is impossible to give you directions applicable to each case, but I would recommend to all who are four hours in labour, to lose from ten to twenty-five ounces of blood, according to their vigour, unless reduced by disease, as before remarked. There is nothing which will so lessen the painful contractions of the womb, and distension of the exterior parts; so effectually prevent their inflammation, and the subsequent diseases of the constitution, which destroy so many.



LETTER IX.

CONTENTS. Treatment of lying-in women to prevent their diseases—of their milk—diseases of the parts concerned at birth—of faintings—chills—local pains and inflammations of the parts—after-pains—inflammation of breast—sore nipples—milk fever—puerperal fever—miliary and common fevers—swelled leg and mania.

THE proper management of women after child-birth, is a most important subject. The great irregularities and errors in the common treatment of lying-in women, have caused physicians of the best abilities, to take the subject into consideration. The result has been the unquestionable establishment of a course in direct opposition to the old.

Most of your sex indulge in great apprehensions of the dangers of bringing forth; they seldom fear the hazards of the succeeding month: but I will venture to assert, that two women have died from mismanagement after delivery, for one at delivery. It is an established fact, that our systems very well endure even the excesses of any one state continued: in any wet, dry, cold, or hot climate, our bodies will be in perfection; but the moment changes are made, the animal powers are affected and diseased. The delivery of the great mass contained in the womb, which for nine months it had so highly stimulated, is a change

producing as great a revolution in your systems, as any to which your bodies are exposed. It is at this revolution that diseases enter, over power, orundermine your constitution; and that the exertion of the greatest wisdom is demanded for your escape.

You have been told that your systems, during pregnancy, were in an inflammatory state, marked by quickened pulse, and the buff coat appearing in your blood when drawn. The evacuations at delivery lessen, but do not relieve it. A fever of considerable action follows; an over secretion of milk marks the excitement, necessarily increased by stimulants and confined air.

With such facts, would you believe, if you had not heard, and probably often seen, that it is most customary to dose women after delivery with spirits, wine, and spices; their heat and exhalations retained, still more stimulating their bodies; and the contamination of the air they breathe, increased by bed curtains and closed doors?

I have already suggested to you the selection of the largest room in your houses for delivery. I would press that from the beginning to the end, the door should be kept a little open. The current of air should be kept off with a screen, not by bed curtains. Every thing filthy should instantly be removed from the room: old carpets among the number, unless effectually washed. The cleanest room about a house, should be that used for lying-in. Frequent cleansing, and a free admission of fresh air, are to be had, without exposure to cold. True that nothing is more destructive to women than receiving colds after

child-delivery; but those are ten times more subject to them, who are confined to a close air, than those who are not. I am sure, by the exercise of your own sense, you will always find means to keep your bodies comfortable, neither oppressed with clothing, or so exposed as to receive colds.

The treatment every woman requires after child-bearing, is almost precisely that directed for the small pox. By following that course, you will find benefit equal to that which was found on substituting a cooling diet and air, for the heating, stimulating practice pursued formerly, with those who had the small pox.

After a woman is wiped dry, and rolled over, or lifted up, to the other side of her bed, she should, if not disagreeable, lie on her back, with a pillow on her belly, which will produce a moderate compression on the parts. The more perfect her rest, the better; there should be as little moving as possible. The child should always be applied to the breast before six hours elapse, after washing the nipple in warm water, to take off the bitter matter adhering. Those who have had much loss of blood at the delivery, will probably be long in having the milky action in their breasts. To such, as to all doubtful of having milk in time, I would strongly recommend the application for an hour or two, of a large, soft, warm poultice of bread and milk, around and over the nipple, which will foment the parts, and promote the secretion of milk, with less febrile exertion of the system.

At the beginning of the second day after delivery, and never later, every woman should have a flannel roller, or

some kind of compression applied around her belly. This is not designed to make her sides grow together! therefore it is to be moderately close, rather loose. It should be continued during her month's confinement, so that the sides of the belly being kept from distension, her belly will not be so apt to protrude or distend, after the recovery. A tight, instead of a simple supporting bandage, is injurious. On the second day, a dose of castor oil, or magnesia, or salts, ought always to be taken, if the bowels have not been opened since delivery. An injection of warm soap and water will answer, if the medicine be objected to. You have no idea of the degrees of disease brought on by neglecting to do this. The bowels have been in an unusual state, and their diseased action is readily excited, by the confined contents. One third of the women who have died, while lying in, I am convinced, have perished from neglecting to evacuate their bowels. Indeed, I know the importance of it so well, and feel such anxiety for your escape from disease, that I most earnestly entreat you, for your own and your child's sake, never to let more than twenty-four hours elapse from the hour of delivery, until your perfect recovery, without having an evacuation from your bowels, naturally if you can, but if not, by the artificial means of introducing a piece of soap in the fundament, or of an injection, or a laxative medicine.

The proper place to have this evacuation is in bed, lying over a bed pan, which ought to be in every house. When they are not to be had, a piggin with an additional hoop at bottom, sawed off, two inches from the bottom, then covered with plank; this top to have a round hole made in it, then to be screwed or tied to the piggin, will

answer as well as the best bed pan. The cost will not exceed a dollar; and take my advice, always to have one in readiness in your families; it will often be of service, it may even be instrumental in preventing an exhaustion, which might end in death.

The next thing I wish most earnestly to recommend, is, to wash the birth-place every day in warm soap and water after delivery, for at least one week. It may be done under the bed clothes, a little elevated at bottom. A basin pushed under the breuch is all the preparation necessary. Women in confinement ought to have a syringe for injecting in the bowels, and the same will answer to squirt warm water up the birth-place. The utility of taking away the irritating secretions from the parts after delivery, (called lochiæ,) is indeed truly great. The retention, inflaming the womb and bowels, has been a great cause of the fevers of lying-in women. This discharge generally lessens on the third day, when the breasts distend with milk; it varies considerably in smell, colour, and quantity. These changes in smell and colour, arise chiefly from the varying putrefactions or fermentations it undergoes after it is secreted by the vessels of the womb. I mention this, to induce you to be the more particular in its removal. The quantity of the discharge differs in almost every woman. It indicates the degree of increased action in the womb. When it is suddenly suppressed, as it is by improper exposure to cold, the remedy is to bleed a little, to foment the belly by cloths, taken from hot water; to give a purge and clyster immediately. Whenever it is of a very offensive nature, by all means inject, with considerable force, warm soap and water up the womb; it will assist in

the expulsion of the clots of blood that may be detained and in other respects will be of great service to the system. A common squirt, made of elder, will answer the purpose; and I beseech you to inject soap and water freely, if not daily, at least on the slightest appearance of disease.

The linen should be changed every day during confinement; and dry cloths pushed underneath the breech, which can be done by a good nurse, without disturbing the patient.

DIET.

The next subject I have to press on your attention, is the proper diet of a lying-in woman.

And the first remark I have to make, is, that the intended kindness of women to each other in this state, has destroyed more than it has saved. The diet of our penitentiaries, bread and water, would have proved a blessing, from the highest to the lowest of your sex, if it had been strictly adhered to for the first two weeks after delivery. I could scarcely name a disease which has not been brought on, either directly or indirectly, by the cramming of strong stimulating food during their confinement.

It is not my intention to recommend almost starvation, as has been done so extravagantly by some writers: but moderate diet. I would advise every woman to eat small quantities of food; bread, potatoes, rice, barley, or any vegetable body, nothing heating, no spices, from the

beginning precisely at the same hours the meals are taken in health. The keeping up the habitual action of the stomach, has a powerful effect in keeping off diseased action. The quantity the first day should not be much; but after the second day, the bulk taken may be as much as the person was in the habit of eating.

Not till the first week passes, would I consent that meats, butter, and very nourishing articles, as cream custards, &c. should be taken. Nor would I agree to a return to a free use of meat for several days. The drink during this whole time, should be good strong water; weak tea, or gruel; towards the last, if any, very mild soup. A gruel made of oat-meal is greatly esteemed by many ladies.

Unless prevented by good reasons, every woman should sit up a little in her bed, the day after delivery, for half an hour or an hour; she may be supported with a chair and pillow at her back. This sitting up promotes the natural evacuations from the birth-place, and should be prolonged every day, not enough, however, to fatigue. Sometimes this is attended with fainting-feeling; which, when there is no flooding, it will, notwithstanding, be proper to persevere, as it speedily goes off. The woman should not stand up before the fifth or sixth day; and not leave her room before the seventh or eighth; and then but at short intervals. In making these changes, a middle course is to be observed, neither to be exposed to a current of air, or oppressed with warm clothing.

Dr. Moss, the judicious writer before quoted, says, "The treatment of lying-in women, has been, till very lately,

universally founded upon the supposition that, from the moment of delivery, and for a certain time after, they could not have too frequent and pleutiful supplies of warm liquids, cordials, and nourishing food, in the form of gruel, of different sorts, made with spices, with the addition of wine or spirits; and that an unusual degree of warmth and sweating was to be kept up by these means, further supported by the warmth and closeness of the room, confinement to bed, and additional quantity of bed clothes. All this was done with a view to support and recruit the strength and spirits, and to keep off cold and its effects. However, these opinions and practices are proved by experience, not only erroneous, but to produce the very evils they were intended to lessen and obviate.

"There is, from the time of delivery, a constant, particular, and natural propensity and disposition to fever, which gradually increases the first three or four days, and is a source of great danger. Whatever will add to the heat of the body, or action of the system, will increase and prolong this fever; than which, nothing is more calculated than wine, spices, cordials, and liquids of all kinds taken hot, with unusual warmth in the room and bed. A person in the highest health, so treated, would most likely have a fever: and it is easy to conceive how much the milk fever of women, and all its consequences, are to be aggravated by such treatment.

" A coldness and shiverings very commonly accompany all feverish complaints, and of course very common at this time; which may have led to the notion of the warmth, and warm things being proper, by way of preventing them, and removing them when present: but this is a false and mistaken opinion; for whatever brings on the fever, may be said to bring on the shiverings also, as the shiverings will not come on if the fever is kept off; and when the shiverings are actually present, the most heating things will not lessen or abate them, so as to do good: therefore no more than a moderate warmth should ever be employed for that purpose.

"The sweating which is brought on by this warm treatment, has also been supposed necessary to prevent or carry off any degree of the fever, and to prevent the shiverings; but which is a notion as fallacious as the other, as it not only serves, when in excess, or long continued, to support and increase the fever, but exhausts the strength and spirits.

"Those who lie-in, are sensible how liable they are to be over-heated, by the most trifling additional heat of the room or bed, or by taking any thing warm, which makes them feel very uncomfortable and uneasy to themselves; often have the head-ache, perceive a faintness, weariness, and depression of spirits; all which continue, and are increased, according as the heat and heating things are repeated; and are the symptoms of the feverish complaint mentioned. On the contrary, they who are never exposed to be over-heated by the warmth of the bed, the room, or what they take, seldom or never experience these disagreeable sensations, but feel comfortable and easy to themselves, and find their strength and spirits increase apace; all which desirable circumstances, with many others, are entirely effected by subduing and keeping off this feverishness, by cool treatment."

You will, ladies, be well paid for imposing on yourselves these restraints after delivery. Give no attention to the stories of perfect recovery under a different treatment. I beseech you to bear in mind, that it is not so much on account of present exemption from disease, as to save your constitutions, which at some future day will suffer for your transgressions. After this operation of delivery, your systems are in their most delicate state; from the most inconsiderable causes, sensibly or insensibly, they become, or will become, most seriously affected. To conduct you with safety through these changes, far more skill is requisite than for the delivery of your offspring. Indeed, for the latter, wise nature is the actor; for the other, management; the directions of our confined minds are to come into operation! Do not understand me as saving that you must consider yourselves as patients, requiring doses from doctors: you only require the hourly exercise of common sense. Be quiet in mind and body: most gradually let your systems be restored to their common state and action, by returning to your habitual diet and exercise in slow degrees: subdue all inflammation on its first approach, by abstinence, and by evacuations. These are the suggestions, not so much of medical knowledge, as of common sense. Observe them; and if in other respects you do not act in opposition to the dictates of this common sense, you will pass through child-birth with a safety greatly superior to that of the generality of your sex.

OF GIVING MILK.

I have now to urge the necessity of all mothers suckling their own children, if they desire to preserve their

health. It is to me a subject of astonishment, how any woman could be so lost to the feelings of nature, as to give up the pleasure of this undertaking. As they are not alive to the joy of furnishing the food from their own bodies for their babes, they ought to be solemnly warned of the effects on their own constitutions, by such neglect. Such is the wonderful nature of the system, that no one function can be suspended, without its having some influence on other parts of the body. Unless every part goes through its natural action, or irritation, some other part of the body will, even at most distant days, take on an action of disease, equal in extent, and more fatal in consequences. The womb, I believe, never properly performed its office, when not relieved by the determinations to the breasts. Nor is this the only evil; for a little while you may escape disease, but at last you will suffer greatly for not conforming to nature in suckling your children. Cancerous womb and breasts, diseases of the bones, rheumatic and other pains, will come on, as symptomatic of the action which would have attended the milky secretion. For ever bear it on your minds, that nature will not be trifled with; her laws are not to be violated with impunity; atonement she will have for all your irregularities. Your physicians may postpone, but your bodies must make the payment at last.

It is a subject of considerable anxiety among mothers, what is the best food for them to take while giving suck. I am happy in being able to settle this question with perfect certainty; and I beseech you to remember it.

I have already told you, that the stomach secretes a liquid to dissolve what we eat, which becomes adapted to the

nature of the food we take; a change in diet then necessarily changes this liquid, and the stomach can never be changed, without its affecting other parts of the system. The diet then for a woman, is the diet to which she has been most accustomed. If she has not been habituated to any one, she should commence while giving milk, for at least the first three months, until the powers of the babe become equal to the change. The diet should not be so thin as is generally taken; it causes the milk to be too watery; requiring such large quantities for the child, as to derange its stomach, and incline to gluttony. This effect is pretty much as the secretion of urine on drinking freely of liquids; it contains not an eighth of the salts and other matter, which it has when secreted without such drink. The liquid does not go to the glands, but the glands sympathise with the watery excitement of the stomach, and secrete the watery fluid. The proper diet then for mothers is one of solids, only a moderate quantity of liquids; never changed for the first three months; always, when to be changed, slowly done.

It is improper for women to take large quantities of stimulating drink while giving suck. There will be an abundant secretion from the stimulus of exercise; and this is the best stimulus. It is because women giving milk are so sedentary while suckling, that there are such determinations to the breasts, which end in so many disorders of the parts. They should take more exercise, by walking at this time, than at any other, in order to equalize the action of the blood vessels. Among the delicate I would recommend the stimulus of any white pure wine, with moderate dilution.

Some women give but small quantities of milk; in general the difference in quantity is made up in quality. The means of increasing this secretion, are, free living, great exercise, much handling, and drawing the breats after the child has sucked. They should be drawn with a strong mouth, fully exerted, particularly when the action of the pulse is increased by excessive diet or drink. And there can be no doubt of success, especially if a large hot poultice be immediately applied for two or three hours.

When it is designed to suppress the secretion of milk, a directly different course should be pursued. Abstemious diet, avoiding salt, taking but few drinks, and a daily purge, are called for. The whole breasts should be covered with a rag wet with a weak, cool solution of sugar of lead, to be applied every two or three hours. Sweet oil may be substituted at night. When they become painfully distended with milk, they should always be slightly drawn, merely enough to relieve the distention.

DISEASES OF LYING-IN WOMEN.

FAINTINGS.

The first complaint after confinement, is generally a sense of faintiness. As soon as observed, an examination should be made, to ascertain if there be flooding. In this case, cold applications, and cool air, are indispensable, and should be fully used; the head kept low, and the womb compressed with the hand, to make it contract. When there is no loss of blood, a glass of wine or toddy should be given

with gruel. A wide bandage around the belly, drawn tolerably tight for an hour or two only, will support and compress the parts, and thereby relieve the complaint. Sometimes this arises from the falling down of the womb; which points out the propriety of feeling for the womb, in the belly. When there is great coldness of the extremities, hot applications should be made to them.

CHILLS.

When the chills and coldness which women generally have after delivery, are excessive, they are to be relieved by hot bricks to the feet, wrapping the legs up in hot flannels, and hot applications to the belly, opposite the stomach. Their legs may be rubbed under the bed clothes, with a coarse brush. But it is absolutely improper to take stimulating drinks, as they actually increase the fever which ensues. Hot tea or gruel is the only drink that ought to be taken. When the shivering is very violent, it is expedient to hold the patient fixed, until they subside.

AFTER PAINS.

These pains are generally least distressing at the delivery of the first child, and after long tedious labours. They arise from the contractions of the womb, to expel clots of blood, and the secretion contained in it. Sometimes the pains are almost as severe as those of labour. They are felt in the lower part of the belly, and sometimes in the back, like those of labour. They are usually accompanied with the discharge of clots of blood, and frequently are renewed for a day or two, especially when the child is applied to the breast.

When these pains are moderate, they should not be interfered with. When they are severe, they will be relieved by a bladder of hot water on the belly, or hot wet cloths. An injection of forty or fifty drops of laudanum in the bowels, will generally afford relief: as also half the quantity swallowed. But this had better be dispensed with, as all stimulants are improper; especially the spices, drams, and wines usually given by old women to relieve this complaint.

LOCAL INFLAMMATIONS OF THE PARTS.

When there is great soreness about the belly, acute sensibility to the touch, it is incumbent on every woman to evacuate herself freely immediately, and to foment the belly by flannels from hot water and sweet oil, until she can get a physician. It is the miserable habit of neglecting this course, which causes so many women to have the puerperal fever.

Inflammations and suppuration of the external parts of generation, are extremely apt to occur after tedious labours. The application of sweet oil, or hog's lard, with or without suet, also poultices, cold and lead water will speedily relieve the parts; or rather, if they are kept clean and greased, they will relieve themselves. Whenever the sides of the birth-place ulcerate, greased lint or rags should be daily applied, and stuffed between them, so as to keep their edges apart. Women are also very subject to a bearing down of the womb, termed its falling down, when describing the diseases of the womb. To remain lying quietly, repeatedly in the day washing the parts, squirting water up the birth-place, fomenting with wet cloths when painful; taking no-

thing to stimulate the system; are the prescriptions to be attended to. Affections of the stomach, head, and bowels, often attend this complaint, and are mistaken for original affections, instead of those from sympathy. Dr. Burns says, "although rash management on the part of the midwife may occasion this complaint, yet it is much oftener the fault of the patient herself; getting up too early after delivery or miscarriage. There is another affection which may be mistaken for this; it is a relaxation and protrusion of the passage to the womb; forming a soft swelling at the side; sometimes entirely encircling the opening, at others, greatest at one side; it gives no particular uneasiness, and disappears on going to bed. The cure is effected by washing it with weak solutions of sugar of lead, of white vitriol, or of alum. The frequent application of cold water alone, often cures.

The parts about the fundament are very apt to become irritated, constituting lesser degrees of the piles. The moment pain is felt in these parts, rags, wet with a weak solution of sugar of lead, should be applied; a rag wet with cold water, will often relieve. When the irritation is considerable, sweet oil, or fresh hog's lard, on going to sleep, will be of service; you should refer to what was said on the subject of the piles. Sometimes the irritation about the fundament arises from small worms in the lower gut. Injections of brine, of sugar and water, or of any irritating liquid, will destroy them.

INFLAMMATION OF THE BREAST.

The inflammation of the breasts is a source of incalculable misery to mothers, and deprivation to children.

All mothers should have such affections in their view at every confinement, in order effectually to guard against them. No complaint can be more certainly prevented by proper care.

You must bear in mind, that your systems are in an inflammatory state after delivery, for two or three weeks. It is the general fever which produces these local obstructions in the breast. The means of prevention, are; never fail, three hours after delivery, to apply a soft, warm poultice of milk to the nipple and breasts, to favour the discharge of the first milk. Let the poultice remain from two to four hours; and, if the child do not suck, let some person suck a LITTLE milk from the breast. Let the breast be bathed with sweet oil, if possible to be had, if not goose grease, or hog's lard. Never let the diet be free, until the secretion of milk be well established; and never let the breasts remain painfully distended with milk; for, in every stage of giving milk, when the breast is full, from the slightest cold and fever, inflammation is apt to ensue.

The most important means of lessening the liability of the breasts to inflammation, is; never to have them too thickly covered, never fail to wash them every morning in cold water as regularly as the face. I dwelt sufficiently on the influence of cold water on important parts, while advising the daily sitting in a tub of cold water. The whole is applicable to the breasts; most animals have their teats exposed to cool air, and they, as the negroes, have but few afflictions of them. At first you can wipe them with a wet cloth, then lean over a basin filled with water, and let one at a time be dipped. Indeed you will find this one of

the most effectual means of preventing the inflammation of the nipple as well as the breast. It will give a tone, a hardening to the parts, which, exclusive of the cleanliness of the habit, will be extremely advantageous. You find your hands and face improved by this cold washing, and why will you withhold it from your breasts?

Lastly, the moment there is the least appearance of inflammation, apply a solution of sugar of lead (a tea-spoonful of lead to a pint of water.) Keep a rag wet with this constantly on and around it, until the inflammation disappears. If the inflammation increases, by all means apply leeches to the part, take a strong purge, and refrain from taking more than half of your ordinary diet, until the cure be complete. I have seen such excess of agony from neglecting these precautions, that I feel a strong solicitude to enforce the observance by every woman with an infant at her breast. I am positive, that no woman will have an abcess, (called boil,) on her breast, who will duly attend from the beginning.

If the inflammation be not dispersed, its extent will be greatly reduced; and this is an important point. The old practice of hot poulticing the lump should never be done; nor is rubbing the breast with the hand proper. Nothing that gives pain should be applied. When it is ascertained that the boil will suppurate, it is best to discontinue the lead, and to apply bread and milk poultice. When the matter is fully formed, it ought, at its lower depending part, to have a small puncture, very small, for the gradual escape of the matter without admitting air. As soon as opened, a little lard may be applied to the edges, then the

solution of lead is to be continued, by covering with a wet rag as at first, in order to prevent a return.

The question of drawing the nipples, when the breasts are in a state of inflammation, has been differently decided by physicians, one in favour, the other opposed. The propriety, however, of the prescription, depends on the treatment of the patient. If it be determined, that the woman shall eat and do every thing she can to increase the inflammation of the system, drawing the breast is improper, for it only brings on an additional determination to the part, tending to increase the disease. But if she refrain from inflaming her system, by exercise, diet, and drinks; if the breast be kept particularly cool, a rag wet with sugar of lead to the outside, (not on the nipple, where it may get on the child's mouth,) then moderately drawing the breasts repeatedly in the day, is a most powerful remedy in relieving the inflammation.

SORE NIPPLES.

This is a complaint to which most women are subject; and as it is extremely distressing, is worthy of serious attention, as well for the prevention as cure.

The frequency of the diseases of the nipple, unquestionably arise from the improper manner in which they are universally treated. Mothers expecting their daughters to become mothers, should pay particular attention to their manner of binding their breasts. Compression continued, will cause the absorption even of our limbs to be almost completely reduced: no wonder then, that the tight ban-

dages around the breast, reduce its size, and destroy the nipple. No females but women have their teats compressed.

In order to guard against sore nipples, they are not to be compressed, and are to be washed daily in cold water, as regularly as the breast. In those cases where the nipple has sunk, or been pressed in, wearing rings of wax over it, so that the nipple may protrude or pass through, or wearing the glasses called nipple glasses, during pregnancy, to promote the lengthening of the nipple is proper. Washing them in brandy and water, has also been recommended for hardening them.

When the nipple becomes sore, it is first necessary to guard it against the rubbing of the clothes, by wearing, during the day, a wax cup over it, made so as to receive the nipple. Those made of lead are better than of wax. Washing them with a weak solution of sugar of lead in the beginning, is of great efficacy. Washing with a solution of alum in brandy, with spirits, borax in water, a solution of nut galls, laudanum and water, opium in water, port wine, and such articles, are to be tried occasionally, for a few days at a time. Dr. Bard says, "simply keeping a linen cloth constantly wet with rum, over the nipple, will frequently do more than either; but then it must be kept constantly wet. Sometimes precipitate ointment, on slips of rags, and applied, has done good." It has been found of service to procure the teat of a heifer, (let her be dead before it is cut off,) and fastening it to the nipple of the mother, and a metallic or wooden pipe to the other end for the child to suck. The best application to the sensible

parts or sores around the nipple, is lunar caustic. The caustic is to be applied to each little ulceration, as is done for warts. Let the parts be tolerably dry, the end of the caustic merely moist, (not a drop pending to it,) and there will be but little pain; the cure is certain. The milk can be drawn on covering the nipple with a rag, as used for straining milk, and given to the child: as soon as the scabs come off, which will be in a day or two, the child may be applied to the breast. To preserve the parts clean and cool, and to be as little moved as possible, are important points.

MILK FEVER.

Between the second and third days after delivery, the breasts become distended, from the milk secreted in them, and the discharges from the womb diminish. This is attended with some heat, thirst, head-ache and fever. This fever is partly owing to the disturbance, which, to a certain degree, constantly takes place in the system, whenever a new process is established; and partly to the swelling and irritation of the breasts themselves. The degree of the action will be greatly lessened by following the advice of early applying a soft poultice to the breast, to favour the escape of the first secretion; then never failing to apply the child to the breast, within from six to twelve hours. Rubbing the breast with sweet oil, goose grease, or fresh hog's lard, will tend to prevent, as also taking some laxative, and confining to a low diet.

When the fever takes place, the treatment is very simple. Give any warm drink, as lemonade, gruel, or weak tea; allow the free entrance of pure air: if the feet be cold in the beginning, apply hot flannels. During the whole fever, the above drinks may be taken. In general, no other prescriptions are requisite; but if the fever be high, the breasts painful, a purgative of salts should be given, a slight bleeding, then two grains of tartar emetic in half a pint of water, to be taken one eighth every hour, till perspiration is excited. No heating articles are to be used; when the fever is over, the recovery is rapid, to be promoted by sitting up, and taking the food before prescribed.

PUERPERAL FEVER.

The puerperal is commonly called the child-bed fever. When it comes on, it is generally in the first week after delivery, about the third or fourth day. It begins with a shivering like the cold fit of an ague, and like it, is succeeded by great and burning heat of the whole body, thirst, flushing in the face, pains in the head and back, sickness at stomach, especially with great sensibility of the belly, so much sometimes, that the weight of the bed-clothes is oppressive; the belly feels full, sometimes there is great pain and a looseness. Sometimes the disease comes on without a shivering fit, beginning imperceptibly with languor, faintness, sickness, frequent vomiting, sweating, and looseness. It is distinguished from the milk fever, by the shivering, and by the breasts, which do not swell and become hard and painful as in the milk fever.

This disease may be defined a general fever, partaking of the character of the prevailing fevers of the place where it appears, attended by inflammation of the womb, and the adjoining parts concerned during delivery. Hence in wards of hospitals, in confined rooms, in unhealthy spots, it often appears of a low, nervous character; and in the neighbourhood it may be inflammatory. It is prevented by adhering to the directions given for the conduct of women while lying-in; most of all, by keeping the bowels open, the birth-place clean, and pure air.

During the cold stage of the fever, hot applications are to be made to the feet. When the hot stage comes on, cool drinks are proper. The patient must be blooded and freely purged with calomel, followed by a dose of salts; a solution of tartar emetic, ten grains to a pint of water, and one or two spoonfuls taken every hour or two, so as to keep up a constant sickness of stomach, will afford the best means of relieving the fever. Antimonial wine may be substituted, or any preparation of antimony; but you may rely upon it, that keeping up the sickness just so long as the fever lasts, is the only certain method of cure; you should inject in larger quantities in the bowels, if the stomach do not retain it.

The belly is to be well covered with sweet oil; occasionally warm cloths, wrung out from hot water, are proper in allaying the irritation. As I never knew good sweet oil to be applied to or near an inflamed part, without lessening the irritation, I would not only have it applied on the belly, but injected up the bowels and birthplace, and detained there as long as possible.

When the action of the system is reduced, or when the disease assumes the low nervous character, then an oppo-

site course is proper; wine bark, toddy, nourishing diet, are requisite, in such portions as will keep up the action of the system. But I suppose you will be sure to have a physician to prescribe in these cases.

MILIARY FEVER.

I extract the following from Doctor Moss, as his testimony may have the more weight in securing your attention.

"A miliary fever is what lying-in women are known to be sometimes liable to; and is known and distinguished by an irruption resembling a rash, coming out commonly first upon the neck and breast, afterward upon the other parts of the body, and seldom or never upon the face: it generally appears the thickest upon those parts which are kept the warmest and closest covered.

"The eruption, upon its first coming out, is red; but towards the second or third day it becomes white; and soon after goes off with a dry scurf. The complaint does not however terminate here, as it is immediately succeeded by another rash or eruption, which proceeds, and goes off, in the same manner; and that, sometimes, successively and repeatedly.

"The time of its first appearing is uncertain: it seldom comes before the end of the first week; and may happen afterward at any other period of the confinement to the bed particularly. It is attended with a sense of weakness, and a dejection and depression of spirits.

"This fever, and these appearances, are entirely occasioned by much warmth, warm and heating things, and more especially, by much and long continued sweating in bed, as there is every reason to suppose it never happens without, and except in consequence of much sweating. The means for preventing it therefore are very clear and obvious; and if the method and directions at, and from the time of delivery, and during lying-in, are properly attended to, it may always be with great certainty prevented, and never be feared or apprehended.

"With respect to the treatment and cure of the miliary fever, when it does happen, it may be observed, in general terms, that the same means which will prevent it, are also the likeliest and best suited to remove and cure it. The medicines, and other medical treatment of it, cannot, with any prospect of advantage be here given; however, the following directions may, so far, be safely observed and attended to. Every means that can heat the patient must be cautiously avoided. The room must be made cool, by removing the fire, or setting open the door, and The bed-curtains must be uneven a window if needful. drawn, and the additional quantity of bed-clothes, if any there be, be removed; all which must be done gradually. Whatever she takes as food or drink, must be cool, and without spices, wine, or spirits of any kind. If she is costive, a stool or two, and not more, must be procured by a clyster, some laxative, infusion of senna, or castor oil: much of a looseness will be injurious.

"As soon as, by these means, the heat and sweating are checked and abated, she must be raised up and supported

in bed, and, with the assistance of a bed-chair, she will be able to sit up in bed; and which she may do once, twice, or oftener in the day; observing that she be not too much covered up, and muffled in the bed-clothes, &c. and that she has her hands and arms out of bed, which will be a means of putting an entire stop to the sweating, and, of course, of removing the disease. She ought, as soon as she is thought able of bearing the fatigue of it, to be got out of bed once a day, which will be an effectual means of removing any remains of the complaint, and also of preventing a return of it. The notion that is commonly entertained of the propriety of keeping up a heat and sweating, by way of forcing out the rash or eruption, is very erroneous, as the heat and sweating are the sole causes of the rash, and consequently the removal of them must be the most sure means of removing the complaint: and except the sweating is checked, and even entirely stopped (which may be done with safety, by degrees,) all other attempts to remove the disorder will be vain and fruitless. It is well known that long continued sweating will alone produce a rash at any other time, and upon any other oceasion.

"This complaint is justly dreaded, as it has proved fatal, in this situation, when in the extreme; although a slight attack of it may be got over without danger. It was very common, when sweating, and long confinement in bed, and heating things were in vogue; and is much less so since the cool treatment has been introduced. Those of weak and delicate habits seem more liable to this complaint than the strong and healthy."

COMMON FEVERS.

There is a fever common to many women in child-bed, called a weed. But there is no foundation for particular names for any of the fevers to which such are subject, excepting the milk fever. As before remarked, in this state their systems are very susceptible of febrile action.

The directions for treating any kind of chill and fevers, are the same as those offered for the puerperal or child-bed fever. In the cold stage, apply hot articles, slightly burning, to the extremities; in the warm or hot stage of the fever, evacuate and keep cool. A good purge in the beginning; and any preparation of antimony, taken in small doses, to keep up for hours, and sometimes a few days constant sickness at the stomach, is the sum of all the improvements made in treating persons under fever. I would strongly urge to all females labouring under any feverish symptoms, to resort to these antimonials in preference to all the trash which has been offered, as sudorifics, cooling powders, and the like nonsense.

SWELLED LEG.

Child-bed women are liable to a very peculiar disease, of which a swelling of the lower extremities, preceded and accompanied by great pain, difficulty in moving, are the most remarkable symptoms; not appearing connected with any peculiarity of constitution or preceding complaint, nor the kind of preceding labour, or on the treatment before or after child birth. It occurs at any period from the first or second day, to two or three weeks after delivery; it is preceded by general uneasiness, lowness of spirits, slight pains about the womb, with a discharge from it peculiarly offensive. These symptoms seldom command much attention, until the patient is seized with pain on the inside of the limb, commonly about the calf of the leg, which soon extends from the heel to the groin, along the course of the vessels called absorbents. The limb soon after begins to swell; the soreness extends all over it, so that it cannot bear the slightest touch, and every attempt to move gives exquisite pain; the skin becomes glossy and pale, the countenance is expressive of great anguish and dejection, the pulse is quick, the heat of the skin increased, the tongue white, and the urine muddy.

These symptoms strongly mark the absorption of some acrid, irritating matter; and no doubt it is taken from the womb. The prevention must depend on cleansing the birth-place, injecting water with such force as to enter and cleanse the womb.

The cure of this complaint is often tedious; sometimes the other leg takes on the disease, as the first subsides. Gentle evacuations, keeping the bowels open, bathing the limb in sweet oil, and in oil and laudanum in equal parts, is always proper. Laudanum may be taken to procure rest, when the pain is violent. Dr. Hosack of New-York, and other physicians of eminence, recommend strongly, taking about two grains of calomel mixed up with the like quantity of squills, made into a pill, to be taken every night, and morning also, if there be no excessive purging. The

moment this disease begins, I would recommend the immediate cleansing of the birth-place, and using the strongest syringe to inject up water: a table spoonful of the finest powdered charcoal mixed up with sweet oil, should, after the washing, be also injected up, and retained for some time by a plug or the hand. This will prevent the discharge from becoming so offensive, and lessen the irritability of the part, inclining it to the absorption.

MANIA OR MADNESS.

The peculiar connection between the womb and the head, was before stated; in consequence of this connection, women after delivery are very subject to head-aches and to madness.

The derangement of women after labour, does not require the evacuations used for this disease on other occasions. Moderate bleeding is proper, if the pulse be active, with slight purging. It is advisable to lose the blood by frequent cupping: issues in the back of the neck are of more use than blisters in this disease. Frequent vomits are very proper. Great attention should be paid to restoring the womb to its natural action, menstruation. For this object, the purges should be of aloes; sitting in hot water, injecting a little brandy and water up the birth-place; blisters on the thighs, or one on the perineum, will be found of powerful efficacy in restoring the menses.

Women in this state should be treated with perfect gentleness; thwarted in nothing not injurious. Travelling, change of air, and the salt bath, will all tend to restore the intellect, as well as the body.



LETTER X.

Treatment of children after birth—navel—washing—dress—applying to the breast—their first diet—that of the mother—rocking—sleeping—to have the mother's warmth, without danger of suffocation—evacuation of their bowels—air for respiration—clothing—exercise—simplicity of diet—objections to compounds as cake—weaning—teething of children—lancing gums recommended universally.

THE next subject that presents itself, as of great importance for all women to understand and attend to, is the proper treatment of their children, to be directed by themselves, not by ignorant nurses. The variety of plans which have been adopted and recommended, would fill a volume. Even the stupid would be astonished to observe some kind of treatment, different from that which they follow, probably of not worse tendency than their own Every midwife and every family appear to have some peculiarity in the treatment of children. Surely the whole of them will have to account for the injuries they have done to babes, if we have ever to account for follies which might have been avoided by the exercise of our natural sense. As an example of such follies, in one of the most intelligent families I have ever seen, the midwife was allowed, at every birth, on first dressing the child, to hold it up by the heels, and give it a shake! then a mo-

derate dose of brandy and water: this stimulus, aided with nutmeg, was poured down the throat! Indeed, almost in every house, I have been struck with the infatuation that prevails on such occasions; something must be given! every thing appearing, but good common sense. Because the business of generation seems so mysterious, something extraordinary is supposed to exist in every department! To break the spell, to put down the preposterous boast of experience among old nurses, and some mothers; to teach the bystanders, that the bodies of the little babes are subject to the same laws as their own, presents as an important point, from the singular infatuation prevailing on the subject. If the little innocents could speak, they would tell you, they knew no difference between being disordered and destroyed by intended kindness, or by intended neglect.

In the hope, that you will yield to reason; with the earnest entreaty, that, for the sake of humanity, you will conform to the course pointed out and confirmed by the most successful practice of the greatest physicians, I proceed to state the directions for the treatment of children which should govern every woman.

After the child is separated from the mother, the utmost care is to be taken to prevent its receiving colds. These colds affect it most seriously, producing inflammations of a destructive kind, in the lungs and bowels. In order to guard against them, the child should be received in a warm flannel, having an opening to breathe, and kept in a warm place, where no cool air can have access, until warm water is procured for washing it. Never use cold water

for the purpose, and nothing but warm water. By gently washing it in warm water, the matter adhering to the skin will come off, if not the first, the succeeding day. After it is kept in the water a few minutes, undergoing this gentle washing, it is to have a linen rag put on its navel, a burnt rag, or any charcoal might be first applied to lessen the offensive smell of the part that comes off. Generally there is a sore, made by the nutmeg and other trash foolishly applied; there will be none, if the parts are dressed with simple sweet oil, or hog's lard, after the separation of the cord, which takes place about the sixth day; no irritating matter, nothing but something mild is wanted to exclude the air from the surface. After a linen rag is applied to the navel, a band is to be applied around the belly, not tight by any means, as compression of the belly will be injurious. The next object is, to dress the child: no clout is necessary to be put on; the child can't turn, and simply putting a cloth under is sufficient for a month; its clothes should be of linen; no pins to secure them, but strings; never allow its limbs to be confined: the more it can use every part, the sooner will it strengthen.

The child being dressed, it requires nothing more than to be laid down, level, to repose quietly. From the fifth to the tenth hour after birth it should always be applied to the breast of the mother. It wants nothing else; the milk is its physic and its best nourishment. You will observe the redness of the skin, sometimes blisters, and extreme irritability in every part. These are symptoms of its inflammatory state; and these, exclusive of experience, proclaim the folly of giving it other stimulants, drinks, or

mixtures, to add to the too much excited actions of its body. It wants nothing but its mother's milk, for which it should be applied to the breast in the time above directed. The first discharge from the breast will, in all probability, open its bowels in sufficient time. If the bowels are not opened the second day, pushing gently half an inch up the fundament, a small quill covered with an oiled rag, will produce the evacuation; in case of failure, a tea-spoonful of sweet oil poured down its throat, to be repeated in three hours, if the first be not successful; lastly, for continued failure, a tea-spoonful of castor-oil, or a little manna, might be given on the third day. I never knew the introduction of the pipe, as above advised, to fail in producing an evacuation. It is always to be preferred to giving medicine.

It will not be necessary to refer to the medical part, the treatment of the small blisters, swellings, and inflammations, which are so apt to appear on the skin, and parts compressed at birth. The cure is to be effected, by not touching them; some prefer puncturing the blister with a sharp needle, so as to let out the water, without letting in air; a cold, wet rag, applied for a few minutes, will expedite the dispersion of the swellings. For other complaints I refer to the next letter.

The rules for nourishing children are, never for sixty or seventy days, give any thing but the mother's milk; in the beginning give the breast every three or four hours. Some have urged to begin with establishing hours for this supply; but they mistake. The habit is best acquired weeks after. In the womb its body was slowly and con-

stantly nourished; and we should imitate, by having in its stomach, always a little, never much at a time. I'suppose the means I have recommended for exciting the breasts, will have been used to insure the supply of milk. But if accidental causes should render it impossible for the mother to give milk, then, as the lesser evil, some woman should be procured who can yield the supply. Giving infants other food, has done incredible mischief. No other animal requires aught but the mother's milk; yet there is scarcely a midwife or nurse in the country, who is not for pouring down the child's throat, soon after its birth, some of their mixtures. There is not one of these compounds that does good. They pretend they give very little; then the very little can be of no service; never yield a fiftieth part of the nourishment taken away by its acting as irritating substances in the bowels. Instead of giving up the early treatment of children to such attendants, there is stronger reason then than in subsequent advanced stages, for the mothers and friends to exert all their senses on the subject. Follow nature; I cannot impress on you too much. Nature never intended, that for your child's accommodation at birth, a ship should have to sail to the East Indies for nutmegs, and another to the West Indies for sugar, to make the almost universal doses given to children. Nature could hardly have provided against such abominable outrage on its laws: to add to this, sugar and water, and nutmeg, the intoxicating liquors, is shameful in the extreme. If there be not enough milk in the mother's breast, and another nurse cannot be had, then give the like-cow's milk newly drawn, mixed one third with warm water, with very little if any sugar. sixty or seventy days at least, the child may then properly

have its diet changed; first, it is best for some other woman occasionally to suckle it, then the mixture above mentioned, and then milk alone, until all the common articles of our diet may be administered.

The periods of feeding the child should be regulated about this time; beginning to let it suck very late at night and early in the morning. After a week or two, the breasts may very well be withheld during the night, and by degrees reducing the times of feeding to four or five times a day. It is so important that I would impress it an hundred times—most gradually make every change in the child's diet. Begin with the mildest articles, and but in small quantities; the article you begin with, persevere in its use, unless powerful reasons prevent, until the child is habituated to it. I repeat the remark, one good healthy article is nearly as good as another. Boiled milk diluted and bread, or arrow root, or sago, are excellent articles to commence with: weeks after soups and boiled meats may be substituted.

On the subject of raising children without the breast, Dr. Burns says, "a mixture of cow's milk, water and sugar, has been used as a substitute for breast milk. But more advantage will be derived, by adding to cow's milk, a third part of new made whey, (not made by wine,) with a sixth part of sweet cream and a little sugar. Whey, with the addition of cream, and very little sugar, without milk, may also be employed." Children have been reared tolerably well on these mixtures, without the breast, though never as well without as with it; which is a strong reason why wet nurses should be got if possible. Dr. Moss says,

that an excellent substitute for breast milk, is the milk of a cow, (the cow should never be changed,) drawn whenever wanted, and mixed with one third warm water, not to be boiled. The addition of sugar is not needed, better without any, but if any, let it be but little, as the stimulus of the sugar is too strong for the bowels, and often produces disease. It is more incumbent not to change the diet of children brought up at the spoon, than those at the breast, as their bowels are very irritable. Whenever their stools become very offensive, you may rely upon it that they are diseased; in nine times out of ten, from something defective in their diet, often from quantity as quality. Whenever any diet disagrees with them, it should be discontinued, and a physician consulted for directions.

In feeding with the spoon, care should be taken not to feed until the child ceases to eat, a little often is better than much at once; the jaws tire while sucking, but not so much in taking from the spoon.

With respect to the time of moving the child, Dr. Moss remarks, that warmth and rest are indispensably necessary for infants at an early age. "In the first week, it should not be carried out of the room; not till the end of the second week should it be carried out; and then only to adjoining apartments. About this time the child, if it do not appear disagreeable to it, may have its skin rubbed gently with the hand, its legs and arms stretched; it may be handled once or twice a day, for a little time, on the nurse's knee, near the fire. During the third week, the time of the child's being up and out of bed may be lengthened; and after this its other exercises are to be conducted by degrees.

In the beginning, great caution should be observed in carrying the child into strong light, and a damp air."

Many women feel considerable anxiety on the subject of the influence of their diet, on their children's health, especially in early infancy. They fancy that the physic they take enters in their milk, and operates on the child as on themselves; but this is a mistake; and it is folly in a mother to swallow medicines for the purpose of affecting the child. Now it is a truth, that whatever affects the stomach of the mother, affects her milk; and whenever changes in the milk are made, they affect the child, not by any means, however, always in the manner they operate on the mother. If the mother change her diet, or drink, or take any medicine, or get in a violent rage, or have a fever, unless the child be unusually healthy, it will be affected by the alteration wrought in the milk: generally purging will be excited, just as it will be, if any foreign, irritating substance is given to the child. From this an important inference should be drawn by mothers: they should learn to adhere to one diet, to be regular in their habits, to preserve their tempers while their children are at the breast; at least until their constitutions are well improved. Those who have delicate children, should of course pay the more attention to this subject. I will only add, the best milk is given by those females who preserve their health by simple diet, taking only the stimulus of exercise and pure air.

There is no treatment of children found so certainly beneficial, as washing them all over every morning in a tub of warm water, from the day of their birth, till they have passed two years of age. It is a luxury every woman can afford for her child, indeed they will find economy in its use. The free motion of its limbs in water, contributes to its health. The circulation of its system is greater than ours, and therefore in proportion it has more excretions. These excretions are more apt to become acrid and irritate, than those of grown persons. It is therefore most important to immerse them daily in warm water, that the surface of their bodies may be kept clean. Moreover, the warm water tends to equalize the action of all parts of their systems, on which equalization depends their health. I never knew children subject to irruptions, nor one tenth so sickly, when daily made to sit, immersed from neck to toe, in warm water, as others under the same circumstance excepting the washing. If you be a fond mother, half of either reason I have given, will induce you to attend to the prescription. You will be delighted at witnessing the pleasure the child shows in the bath, and much more at the consequent exemption from disease. If you be a friend to humanity, most earnestly entreat every mother, the poor and the ignorant, to adopt the practice; remind them of the facility of warming water with hot stones or irons, and many will be the lives saved. thing but severe illness, should ever postpone the daily operation.

Some persons have recommended bathing the children in cold water, but the shock is too severe; it has been the death of many. Nevertheless many have improved under its operation. I know that the warm bath is best, and I cannot see the least reason for using the cold, excepting the incorrigible laziness of those who may neglect to warm the water. The advantages of a momentary

shock to the skin, are abundantly derived from exposure to cool air, during the wiping. The astonishing improvement I have seen so many interesting little children derive from its introduction, for which important practice, much is due to the zeal and benevolence of Doctor Buchan, that I do most earnestly beseech every mother to let hereafter a tub of warm water be the first article, brought to her children every morning.

The question of the propriety of rocking children in cradles, has been considerably discussed; many doctors urging that the rolling motion stupefies; all nurses urging the great convenience of the practice. I am certain, that the gentle rocking of a cradle, at a proper time, will not be injurious. It should always be most gentle, never allowed by its violence to drown the cries of the child; never to be done when the child is diseased. It is indispensable for the cure of children's complaints, as well as for our own, that they should have rest. When they cry from the pains of disorders, rocking them is excessively injurious; and unless the nurse is cautioned and bound not to rock a child crying from pain, there had better be no cradles. But these cradles probably never did as much harm as shaking the child on the knee, in the way that is so universal, even in the earliest days of infancy. The agitation, most certainly in the state in which the brain then is, must have aided in impairing the faculties of so many. An invariable rule should be with mothers, never to let a child cry without examining and turning it over to rest on another part.

The next subject is, the proper place for children to

sleep in cold seasons. There is a strong feeling to take the child in the bed, although many have been destroyed by the intended kindness. Yet I will assert, that not one has lost its life by the practice, for five that have died by the diseases brought on by the coldness and dampness of the cradle. There can be no doubt, that a great cause of the fatality among children, is their suffering while in the cradle alone. We, in our beds, frequently are unable to preserve our warmth; and no wonder the extremities of children are so often found cold. All mothers in a natural state sleep with their young; the heat of their bodies appears essential for keeping up that of their offspring. Excepting among hogs, I never heard of their being suffocated by the bodies of their parents; and why should not women be able to guard against such a misfortune? A variety of expedients could be adopted to have the warmth of the mother, without endangering the life of the child. The most simple, practicable plan, which presents itself to my mind, is, to have a small plank, but little larger than the child, its edges surrounded with a few pegs, eight or ten inches high, and the little bed to be put in it. Any contrivance may be made to prevent the turning over to the mother; the pegs will prevent her turning over on it. Those who can afford it, can have the contrivance made of as fine materials as they please. The expedient will answer for the rich and poor, the mistress and the slave; the necessary expense not being ten cents, I would earnestly entreat every mother desirous of giving comfort to her child, to adopt the plan. It will save children from many diseases, as well as pains; and it will be a convenience to mothers to have them so near, for the purpose of giving the breast, and applying clean clothes.

Next I have to request your attention to the daily evacuation of your children's bowels. If there be no improper cramming of the child, no sickness, once or twice every day, at stated hours, will be sufficient. The advantages derived from the cleanliness of the habit, should induce every nurse to attend to it. It will supersede the use of the clout in almost every case: a great relief to mother and child. The simplicity of the modes of bringing on the habit, is such, that I feel almost tempted to advise giving a grain or two of some powder along with it, that you might think the dose did the business. But I shall rely on your better sense. The means of effecting this regularity of habit in the child, are precisely the same as in our own case. Turn up its posteriors to cold air every day at the same hour, let nothing prevent, if necessary twice a day, morning and night, at first introduce an oiled rag around a small quill; some months after a piece of soap may be substituted; keep it there till the evacuation is made. After a little perseverance, (if you will not forget once or twice, and let the habit be lost) the child will daily discharge its excrement at the same hour. You may rely upon the success of this treatment in every case, and at all times, except when disease is existing. It will greatly contribute to the health of the child, by preventing the retention of offensive matter in its bowels, which it sometimes forgets to evacuate. Moreover, the children are often afraid to evacuate, because, being great observers of the countenance, they see the displeasure and uneasy feelings excited frequently at the ill-timed deposit. They retain till they can retain no longer, and often show sorrow, not at the bad habit disordering their delicate bodies, but that at

last they are obliged to evacuate. It is the nurse, not the child, that in all cases should be condemned.

I have now to urge for your consideration, the proper use of air for children. They, in proportion to their bodies, require more and purer air than older persons. A confined air is more pestiferous to them than the most fatal epidemics. The difference in the deaths and diseases of town and country children, establish this beyond doubt. Probably an occasional breathing of a pure atmosphere, is more injurious than habitual confinement to one that is defective. Children in very tight houses are never so healthy as those in open buildings; their diseases are more violent; they feel every change of weather. It is equally remarkable, that although they be more healthy in houses of loose joints, in which the air can penetrate, than in those that more effectually exclude the air, they never do well, exposed to cold and currents of wind. They require an abundance of pure air, with their bodies to be kept warm. Indeed it seems incomprehensible, how so many children could have survived the confinement to the air of close rooms, corrupted by their parents, companions, and servants, a crowd which may frequently be found in the rooms of some very wealthy persons, ridiculously afraid to trust their children out of their bed-rooms. All parents should bear in mind, that their children cannot enjoy perfect health, without having good, wholesome air for their lungs, and warm clothing for their bodies. As a child requires almost as much air as an adult, there should be never more than three to sleep in a room of less than twelve feet square, with a door, chimney, and loose jointed window.

Warm clothing in cold weather, is nearly as essential for the health of children as fresh air: comfortable, not oppressive clothing. Let their clothes be changed to suit, not only the varying seasons, but the changes in the day, in spring and fall. It is at these times they are most subject to disease, therefore clothing to suit the day is almost more essential than in the coldest seasons. The fantastic manner in which many mothers dress their childrenarms and breasts exposed, in cold seasons, betrays as much want of sense, as ridiculous vanity. This excessive folly is sometimes defended, with the pretence of hardening their children. Just as the old generals prepared their soldiers for fatigues they might never require, killed about the half in hardening. There can be but little doubt, that a greater number of children have been sacrificed to such schemes of hardening. Better commanders now reserve their men until the time comes for exposure, and so should our better mothers do. You will misunderstand me, if you infer that I wish parents to bring up their children with oppressive care snd kindness; destroying them with daily confinement to close rooms, only taking exercise by rules, and with covering enough to weigh them down. There is a medium in all things, to be settled by exercising common sense, without a bias to any particular system. It is by this that we may all ascertain the best method for rearing children, neither with excessive care or neglect. Free exercise in open air, with comfortable clothing for all parts of the body; a frequent, but not a long indulgence in the plays of childhood, while the weather is bad, are outlines of management, which all of sound mind must approve. We must not deny the propriety of the course, if, in a few cases, we see exceptions to its success. Tendencies to disease are sometimes produced by causes very likely to escape our observation. A too confined or crowded room to sleep in, eating too much of an unusual food, for example, have frequently produced the complaint, that the over careful have ascribed to their children's exposure. Exposure to rains, and more especially exposure to a hot sun, have had great influence in making so many excessively particular about their offspring. They restrain the proper playful pursuits of children, because other children have suffered; and often from what the beasts of the field take excessive care to guard against, that is, exposure to rains, and most to a summer's sun. That a child in our country, in the months of June, July, August, and September, could survive two hours exposure to the rays of the sun, which so frequently kill the most vigorous men in a few hours, is to me unaccountable; and I would not believe that they do it frequently without perceptible injury, but that I see they do escape. Rely not, affectionate mothers, on such escapes! Keep your children from exposure to rains, and particularly a hot sun, as you would from a raging fire, or pestilential atmosphere; often warn them of the dangers in the beginning, and they will habitually shun them: Let all of them play as much as they desire in shades, uncontrolled, with clothing suitable for the day, and with pure air for their respiration; and by such means you will save millions of your offspring from premature disease and death.

Another important point I would press parents to observe, is, a never varying simplicity of diet for their children, at least in the early stages of life, aided by great regularity in eating, and indeed in all other habits. The

numerous specimens we daily see of distempered, distorted people, owe their existence to parents disregarding such important rules. Strange as it may appear, 'tis selfishness, 'tis extreme of weakness, that has led to these pernicious practices to the contrary. Children are perpetually inclined to be doing something; when not at play, they refer to eating; the father and mother find more pleasure in giving than in restraining. They but seldom encounter the labour of thinking of consequences; and the child is not only allowed to eat until distension becomes painful, but it takes sometimes the most stimulating food; frequently is excited by the offer of compounds; most generally with that favourite article, found in so many houses, commonly called CAKE. This abominable compound, first used only for the purpose of stimulating the worn-out stomachs of the intemperate, has disordered and destroyed millions of children. Either of its component parts, separately taken, is healthy; it is when compounded, that it is pernicious. The appetite for it is artificial; and as children have the strongest relish for the most simple food, when confined to it, (as for the mother's milk,) it is infinitely better that they should never have such excitements. It ought not to be allowed, if for no other reason, than the uneasy feeling many other children have, in not partaking of an article deemed so good. I have no hesitation in declaring that its use is as pernicious as dram drinking; that no child under five years ever eat it without injury visible or secret to his constitution. You may perceive how powerfully the compound operates, by having two children under the same circumstances, both accustomed to simple diet; give the one at night cake to eat, none to the other; watch the sleeping; and the starts, the restlessness, if not

the screams, will proclaim, which took the disordering compound. Sweetened light bread is the substitute, but no substitute is wanted; the more simple, the more agreeable will be the diet.

Children ought never to be allowed to eat too much: the means of preventing such gluttony, is to give them some light article to eat, before their regular meals, which prevents that eagerness to eat, which naturally leads to excess. They should always, the moment they awake, take something to eat. In giving them new articles of diet, the commencement should be with small quantities, to habituate the stomach to its digestion. It is excesses, compounds, and irregularities in diet, which have produced so many small persons. A return to the old simple diet of the ancients, would be followed by a restoration of the size of our species.

The time for weaning children, generally the critical time of teething, is next to be noticed. This varies in every country; indeed in each family so considerably, that it is impossible to give any thing satisfactory on the subject. The general rules are, by all means to habituate the child for weeks before to a different diet; by no means suddenly to withhold the breast. Next, the time for weaning should always be taken when the child is in a healthy state. The substitute for its diet, ought at first to be that which was recommended for children in early infancy, the mildest articles. Children have done well when weaned at the fourth month; but unless some state in the mother renders it improper, it is best not to deprive them of the breast before the ninth month. When the parents are

of small stature, it is best to keep the child longest at the breast, as in all other animals it appears to have the effect of increasing their size. Judging from comparison, and from a few observations, I have no doubt such a course, not destroyed by stimulating diets, or drinks, or premature venery, would have the effect of greatly enlarging our puny breed of men and women.

The next subject for consideration is the teething of children; an operation which has probably caused the death of more children than any one to which they are liable; and all from the ignorance and fears of the attendants, often supported by the conceits of their physicians. The important connection between the mouth and all parts of our body, has already been dwelt upon. It is not, therefore, surprising, that such great variety of diseases should follow the irritation in the mouth during teething.

The time of cutting the first teeth is irregular; from the third to the fifteenth month; generally between the seventh and ninth. There are two stages in this operation; the first is about the third or fourth month, marked by slavering, when the child delights in having its gums rubbed; sometimes they have fevers, fretfulness, and diseases of the bowels. The second stage is about the seventh month, when the teeth are penetrating the gums. The gum is swelled, and too painful to allow the slightest touch; as the tooth is about to appear, a white blister appears over it.

Children have often most difficulty in cutting the first teeth; which, if they come in proper order, are, the two lower front teeth, then the two above them; but when the usual time of their coming has past, the two upper teeth will sometimes appear first, then the two eye teeth; but the appearance is very irregular, and not material. About the seventh year, these teeth, give place to new teeth. In order to prevent the diseases so often attendant upon teething, it is necessary to watch the first symptoms of disease, and invariably to scarify or cut the gum, at the same time giving some laxative medicine, and lessening the diet. In the first stage, it may be difficult to discover which gum ought to be cut, but when disease is violent, it is best to cut all over the gums in front. Whenever the gums are swelled, it is then of the utmost importance to cut them freely; a common penknife, or thumb lancet, will answer, and any mother's or father's hands, just as well as a surgeon's. The first object is to draw blood from the part; then, if the symptoms continue bad, to cut down to the top of the tooth. There is no danger of hurting the child; indeed they derive such relief, that often they open their mouths for it, when once relieved. Their gums are very insensible, excepting when, from neglect to scarify them, they are inflamed. Nor need you be afraid of hurting the teeth, as they ascend, covered with their enamel.

A ridiculous idea prevailed among physicians for some time, that cutting the gum gave present relief, at the expense of future pain; that the scar formed when the wound healed, was more difficult of penetration by the teeth. To this day, some are ignorant enough to believe in the doctrine, and refrain from relieving the suffering children, as if their gums could not be cut every day, if necessary, even if their notions were true. But the fact is the reverse. All new formed parts are more easily destroyed than old; they more readily dissolve, or disappear,

as instanced in the cicatrix, or new formed flesh of old sores. To cut a gum over a tooth which has not appeared to rise, is therefore rather of service than injury to its future passage. The greatest surgeon who ever lived, Mr. John Hunter, of London, writes, "it often happens, particularly when the operation of cutting the gums is performed early in the disease, that the gum will reunite over the teeth; in which case, the same symptoms will be produced, and they must be removed by the same method. I have performed the operation above, ten times upon the same teeth, when the disease had recurred so often, and every time with the removal of the symptoms."

I do sincerely wish I could prevail on all mothers or fathers to undertake this gum lancing. Nothing is more simple, or more easily performed; it never does harm, and it would so much lessen the sufferings of the little children, that I should be happy in the recollection. It is best for the child to cry when lancing the gum, as the mouth is then most opened, and the cut may be directly on the top of the tooth. In some cases, where there is reason to believe the teeth to be advancing, yet no visible sign, great relief has been obtained by cutting down to where the tooth should be, thereby letting out blood, with probably some little irritating matter, producing violent action in the system. If you will not do it yourselves, I beseech you to insist on your physicians frequently performing the operation.

I have not dwelt upon the diseases incident to teething, because they are so numerous, and vary almost in every child. The most common are, affections of the bowels and convulsions. When these or other violent complaints

appear, or are apprehended, the child should be blooded, by cupping about the lower extremities, and purges be given, with the *vvarm bath*, (not hot) to take off the irritation. The gums, of course, to be freely lanced. The rule I have adopted, and would prescribe to all, is, whatever may be the inflammatory affection of the child, if it have slavered freely, before, or if it be the time for the teeth to appear, by all means to cut the gums, so that they shall bleed freely.

All parents should be apprised of the importance of teaching their children how to command their own minds in early life. The numerous ungovernable spirits we see daily in society, originate from the folly of neglecting this important object. I make the assertion in the fullest confidence of its truth—that there is no child which cannot be trained, and with but little trouble, to any habits of selfcommand. It only requires a good beginning. The first correct practice is to prevent them from getting in the habit of crying; to make them suppress their cries, at least loud crying; which is not only horribly annoying to others, but calculated to produce convulsions in the child. Whenever they are heard to cry, enquiry should be made into the cause, and their attention directed to some other point. A little perseverance in the beginning, will soon be crowned with success; and it is indeed worth a long attention. The ability to suppress cries, will be followed by ability to command other feelings. The example of submission in the eldest child, will have great influence over the younger; so much, that half the discipline will suffice with them. Children so brought up; do not require or receive a tenth part of the correction of those punished irregularly, or, as it is termed, by fits and starts. The practice I have pursued with my children has been, to begin early with punishment, never to suffer disobedience in the slightest degree; never to withhold one proper gratification they desired; never to allow one that was improper; and the consequence has been, that no children less frequently require punishment.

In concluding this letter, I feel some pain at the apprehension that I have not said enough to induce a strict adherence to the practices recommended. I knew them to be so judicious, that I felt as if argument were useless. The subject is those, of whom our Christ declared, "of such is the kingdom of heaven!" Ladies, if you feel as mothers, if you have souls to partake of the heaven of doing good to innocence in pain, you will not require long arguments to adopt practices promoting the health of children. I ask—I pray you—if I have not urged sufficiently to induce you to do it, then, as a favour, as a kind compliance, in return for the wish I have to serve, immediately prescribe—

- 1. That all little babes shall sleep with their mothers or nurses, in the safe manner pointed out.
- 2. That until their constitutions are formed, their diet shall be simple, and of the same kind.
- 3. That they shall be kept warmly clothed; never exposed to sleep, breathing a foul, close air; nor with windows open.
- 4. That every morning, from birth, for at least two or three years, they shall be put in a tub of warm water and washed.
- 5. That they shall be, as far as practicable, got in the habit of evacuating their bowels at the same hour.
- 6. Lastly, though not least, that whenever their gums appear in the least inflamed, you will, or will have them, freely and often cut.

LETTER XI.

CONTENTS. Diseases of children—first month—colds—eruptions on the skin—sore eyes—swellings and excoriations—hooping cough—croup—of wind in the stomach and bowels—of sickness, &c.—sore head—measles—of colic—convulsions—of fevers—of worms—of chicken pox—of cow pox—of chilblains—of scalds and burns—of the itch—of scald head—summer complaint.

THE treatment of the disorders of children ought to be understood by every mother; as well for the purpose of giving occasional relief, when a physician cannot be had, as to prevent injudicious meddling with their complaints. Improper doses, at improper times, have probably caused the death of more children than have been relieved by medicine.

The first thing to be impressed on the parent's mind, is, that the bodies of their children are governed by the same laws as their own; and the cure of their disorders is to be effected, not by doses operating as charms, but by the application of the principles of medicine to their particular case. The great variety of prescriptions for the diseases of children, in almost every old woman's head, should be abandoned; but few medicines, and those of the most simple kind, are wanted for them.

From the moment a child is born, its system assumes more or less an inflammatory state; its diseases are almost invariably those of high action, requiring evacuations and medicines, to determine to parts not affected. The practice is so simple in most cases, the treatment so well laid down by other writers, that I shall confine myself merely to making extracts from them. From the works of doctors Moss and Burns, the following is taken.

OF COLDS.

"In the first month, most children are affected with colds; commonly in the nose, and called snuffles. Warming the feet at the fire, will often be sufficient to cure them. But when the disease is attended with fever, it is best to administer a vomit. This may be of three grains of ipecacuanha, or of one grain of tartar emetic, in four table spoonfuls of warm water, and one tea spoonful to be given every thirty minutes, until vomiting is produced. The bowels should be kept open with magnesia, rhubarb, manna, or castor oil, in small doses. I would recommend a repetition of the vomit, if the first do not relieve.

ERUPTIONS OF THE SKIN.

"Children, particularly those not daily put in a tub of warm water, are very subject to a great variety of eruptions on their skin, commencing sometimes in the first week of their birth. Different names, as red gum and white gum, are given to each kind; but it is useless, as they vary much, and require nearly the same treatment. In the red gum, there is a number of small, elevated red spots, scattered over the trunk of the body, and sometimes on the cheek or forehead; on the feet the spots are still larger, and contain occasionally a clear fluid. In some stages it resembles the measles. Generally no medicine is requisite;

but if it suddenly disappears, and the child shows symptoms of internal disease, an emetic or purgative ought to be given, and repeated, if not at first relieved. The white gum appears after the red gum, resembling the itch, with white, shining little blisters, containing a little clear fluid. There are other varieties of these eruptions of the skin, but few of them require medical treatment. A vomit or purge to clear the bowels, generally relieves. The prevention is in great cleanliness, free washing daily in soap and water, with regularity in nursing. When these affections of the skin are attended with fever, they require treatment, such as for common fevers, with applications to the parts inflamed, to lessen the action; cold lead water and sweet oil, are the best for this purpose.

" Sore Eyes. Children are very subject, sometimes during the first month, to inflammations of their eyelids and eyes, particularly those whose parents neglect the great preventive of their complaints, setting them every morning in a tub of warm water. At whatever time the inflammation comes on, in slight cases, cold water alone; after a few days, a very weak solution of sugar of lead, fifteen grains to the pint of water, should be applied every two hours to the part. If it do not speedily subside, a purge of oil should be given, to relieve the inflammatory state of their bodies. The inflamed eye should never be turned towards the fire, and the hand of the infant so confined, as to prevent rubbing the part. In cases where the inflammation of the ball of the eye is great, a leech should be applied to the eye-lid, also cupping about the temples; and if the child be a few months old, bleeding four or five ounces may be necessary to save the sight of the eye.

"This cold and lead water alone is the proper application

to the eye, and nothing should be added excepting where the eye-lids adhere together. In this case, the mildest sweet oil, mild hog's lard, or any bland grease, should be applied to the edges. A want of the knowledge to cool, and evacuate at once, and effectually, the children, and avoid every stimulating application, in inflammations of their eyes, has been the cause of the frequent loss of their vision. I trust, that no parent, hereafter, will suffer any other application to their children's eyes, unless from the recommendation of some eminent physician.

"Swellings, Excoriations. For any swelling of an inflammatory appearance, marked by red colour, heat, and pain; the part should be bathed in a solution of lead, of thirty grains to the half pint, and a rag wet with it be constantly applied. When the inflammation is considerable, purging is proper, also bleeding near the part, by cupping. When the skin is rubbed off, (termed excoriation,) as is often the case, between the legs, behind the ears, in the hair, between the toes or fingers; this lead water should be applied, and then sweet oil. In cases of inflammation, a poultice of Indian corn meal, wet up with this lead water, and kept applied to the part during the night or the day, has greatly expedited the cure. When the excoriations or sores have been of long standing, you should, by all means, on drying them up, purge the child once a week, for three or four weeks afterwards; also, diminish its food. The neglect to do this, or to make a slight issue or sore, by means of a small blister plaster, applied and kept to some part of the body, two or three hours every day, for a week or two, has often been fatal; as the system, when the old sores are healed, not having its accustomed irritation, takes on violent disease in other parts. I will add, that the preventive of these complaints, is, daily washing the whole of the body in a tub of warm water, and clean clothing.

" Hooping-cough. There is no disease more generally treated improperly by parents, than the hooping-cough. In the beginning, it is always an inflammatory complaint, requiring evacuations and determination of blood to the surface of the body. Instead of the variety of prescriptions in daily use, give the child an emetic, to be repeated every day or other day, unless the symptoms lessen. For a violent fit of coughing the best remedy is, to pour in the back of the mouth a tea-spoonful of melted hog's lard, which sheathes the part, and lessens the irritation. The tincture of asafætida is highly recommended. A child, grown enough for the purpose, will find some relief in holding very hot water in the back of the throat. It is of great importance to children in this complaint, to keep their skin in good state. A coarse flannel shirt, in some cases; in others, a very rough piece of oznaburg around the breast, have been of great service, by keeping up friction. With the flesh brush, or a ball of wool, the surface of the body should always every night be rubbed. Exercise in open air, while the body is kept comfortable, is immensely salutary, as well as change of residence for a few weeks.

"Of the Croup. The treatment of this disease, the croup, ought to be understood by every mother. It is known by a singular hoarse, hollow kind of breathing, and by symptoms approaching to suffocation. Those living in rooms warmed by stoves are most subject to attacks of it. The remedy is an emetic, the instant the attack commences. When practicable, in violent cases, blood-letting by the lancet, or by cupping, should be prescribed. In general, repeated emetics effect a cure. The child should be kept

reclining in a tub of warm water, and the emetic be given every ten minutes, until the difficult breathing is lessened. When the choice of emetics can be had, seven grains of tartar emetic, in as many spoonfuls of warm water, half a spoonful poured down the throat every ten minutes, so as keep up a constant deadly kind of sickness and vomiting, will be the best. When the determination to the throat is relieved, the child is to be treated as in common fevers, by purging and other evacuations. But remember, the means of exciting vomiting and sickness at stomach, with determination to the skin, by hot water, are not to be abandoned until the distress of the breathing is relieved. In the case of one of my sons, attacked about two o'clock in the morning, with perfect success, I kept him vomiting every ten minutes for five hours, frequently introducing in the back of the throat, a small feather well oiled, to hurry the operation.

"Wind in the Stomach and Bowels. A child, like a grown person, may have wind upon his stomach, which may be troublesome and uneasy to him, without griping him, or sensibly affecting or disordering his bowels, as is discovered by his not being so cross with it as a child is when griped. A child is discovered to have wind upon his stomach, by the wind often rising into his throat, which makes him struggle at times as if to get his breath, and from which he is occasionally relieved by the eructation or breaking of wind upwards; and, as it often returns upon him, it becomes very teasing, and interrupts his rest: he generally takes his food unwillingly. It is common with children in the month who are dry-nursed, and before they begin with what is called possetting.

"A variety of things are given upon this occasion to dispel the wind, some of which have been enumerated: but

none of them, nor any thing else that I have seen given to procure a temporary relief, exceeds spirit of hartshorn, or hartshorn-drops, as they are commonly called. Three drops of the hartshorn may be given, to a child in the month, in about half a table spoonful of cold water, and repeated two or three times in the day, or as there may be occasion. Hartshorn, when it will answer the purpose, is to be preferred to cordials, spirits, seeds, spices, and hot things of any kind: as, although it is fully as powerful in dispelling wind as any of them, it will not, by a permanent heat, nor by repetition, injure the stomach as they do; nor can any bad habit or other disadvantage arise from giving and repeating it as often and long as it may be necessary so to do. It is endowed with a property which makes it a desirable medicine for children; which is, it corrects and removes acidity or sourness, a principal cause of griping with children. Its use in these intentions is well known by grown up persons, with whom it is a favourite and familiar medicine: and the reason why it is not extended more generally to children, proceeds, I imagine, from a supposition that it is too strong for them; but which is a mistaken notion; as it may be given, as above directed, with the utmost ease and safety. The dose here mentioned is the smallest that need ever be given, and it may be increased as a child grows older, especially, to four, five, or six drops.

"As wind upon the stomach is, with a child as well as a grown person, to be considered as a mark and indication of a weak stomach and indigestion; so it will be observed to be most common and troublesome to those children who are dry-nursed, and fed with food of an improper quality, as bread, thick and rice milk, &c. which cannot digest and

pass the stomach so perfectly and readily as it ought to do: for we all know, that whatever is heavy of digestion, and lays long upon the stomach, is not only uneasy, but also causes wind there; and cannot but be sensible how much these painful sensations must be increased, if we were compelled, as infants are, to a constant repetition of the food which occasioned them. Many weakly, puny children, who are even wet-nursed, will now and then be observed to have a wind upon their stomachs; (and the hickup, which they all have at times, is occasioned by it); as also those who are most carefully fed in dry-nursing; but when it occurs only now and then, and that slightly, it is not worth notice; and if any attack of it should seem more severe than usual, the hartshorn and water will most likely relieve it. The occasions which call for a more particular attention, are those where, as above named, when the child is dry-nursed, he takes his food unwillingly, and swallows with difficulty, from the wind rising into his throat, and that for some successive days, a week, or longer. ever, therefore, the complaint appears in this latter form, it will be necessary to pay the strictest attention to his food, and by no means to force more, even of such as is the most suitable, than he is disposed to take willingly. If he is costive, it will be proper to give him a little manna, or a tea spoonful of castor oil.

"Wind upon the stomach, when to excess, and occasioned by the constant use of improper food, is often a presage and forerunner of an alarming sickness, that frequently terminates in a severe griping and looseness, as described in the article immediately following.

"Children also, like grown up persons, seldom have wind in their bowels without being griped by it; but which they will sometimes have, without being either costive or too loose in their bodies. When it so happens, it most commonly proceeds from cold, and will generally go off in a short time. The hartshorn may in this case be tried, although its effects will not always be so striking as when the wind is in the stomach; and if it does not answer, recourse may be had to geneva and water, anise, or fennel-seed tea, &c. If these fail, and the complaint increases, it must be treated as a griping without looseness.

"Some children seem naturally more subject to wind in their bowels than others; and which can be accounted for no otherwise, than as proceeding from a particular weak and tender state of those parts. And as it is much increased by cold, a particular attention must be paid to keep and defend those children who are liable to it, from taking cold, by a proper regard to the closeness and warmth of their dress, and by keeping them out of the air in the first or second month.

A sickness, with or without throwing up. Infants are very subject to a sickness the first or second week. Sometimes they throw up with it; and at other times they do not, but lie in a dozing state, without motion, the lips pale, and a paleness and sinking of the face; and they generally refuse their food, or do not take it so freely as at other times, seemingly owing to their being stuffed and full at the stomach, and not able to get it down. The stomach commonly feels hard, and is sensibly swelled and enlarged.

"A throwing up, or possetting, as it is commonly termed, is seldom esteemed an unfavourable circumstance with young children; yet the sickness that happens at this early period is generally from a widely different cause with the possetting, which rarely happens so early; and when it does, proceeds from a natural and not unfavourable

cause; whereas the sickness that comes on at this time, whether accompanied with a throwing up, or not, is unnatural and unnecessary, and therefore not desirable. possetting, what comes up, is in a digested state; whereas what comes up at this period, and upon this occasion, is scarcely changed or altered from what it was when it went down: and, if it is altered, appears in hard curdled lumps. From which it clearly appears, that the cause of this sickness, as here described, with or without throwing up, and which is so frequently observed to happen during the first three or four days, or as long as the child is fed with a spoon previous to his getting the breast at all, or so sufficiently as to satisfy him without feeding with a spoon, is altogether occasioned by the food that he takes, which, not being suitable, disagrees, and therefore will not digest and pass the stomach as it ought to do, but remains unaltered, till nature, by an effort, relieves herself by a sickness, or a looseness: but until this sickness, or looseness, or both, take place, and while the food stays upon the stomach, it lies there as an oppressive load, and the child is overcome and overpowered by it; which accounts for the child's looking so pale, and otherwise ill. This sickness at stomach, without throwing up, is a very common cause of alarm, and much uneasiness and anxiety to the mother and friends, who suppose the child, from the apparent great, and oftentimes sudden alteration in his look, must be in a dangerous situation; although, notwithstanding the alarming appearances, it is very rarely attended with immediate danger; and, when the cause is known, may, by proper means, be readily removed, and a return of it prevented. The means to be pursued for these purposes are, first, to remove the load from the child's stomach, which will give him immediate relief, as will be perceived by his resuming

his former look; and this will often be done, by giving him a tea-spoonful of castor oil, or a little manna, so as to obtain a free passage, which may carry the complaint off by stool; but if this should fail of giving the wished-for relief, the antimonial puke will scarcely fail of fulfilling the intended purpose. To prevent a return of the sickness, with or without throwing up, the child's food must be strictly attended to; and if (as is generally the case) it happens before the child gets the breast, he had better not be fed again until he can have the breast: but if food or nourishment from the child's real, and not imaginary weak state, is absolutely and immediately necessary, it must be given of such kind as may be reasonably expected to agree better, and such as has been advised when treating of food and diet.

"This complaint is very common, at this early period, with those children who are dry-nursed, or those (especially weakly children) who are fed, in the usual manner, before they get the breast. It is a common attendant, or rather fore-runner of gripes and looseness. It is more rare and less frequent with those who are not fed at all, or properly so, before they get the breast: and when they come to have the breast plentifully, and take it freely, they seldom have any returns of it. It is not, as before observed, immediately dangerous; yet if it is neglected, by suffering the cause of it to be repeated and continued, it may lead to severe gripings and looseness, that may, and often do, prove fatal.

"This sickness, obstruction, and oppression at the stomach, will always occur in a greater or less degree when a child gets the breast the day he is born, which generally is the practice where hired wet-nurses are engaged, and which I have often observed to occasion uneasiness and distress to the tender sufferer. All these are certain truths, and strongly point out the impropriety of anticipating the process and interrupting the order of nature in her own invariable operations, by a blind attachment to prejudice founded in ignorance. Man has a disadvantage with the rest of the animal creation, in this and some other of the simple operations of nature, who seldom errs, except when interrupted by the art of man.

"A sickness seldom seems so alarming when a child throws up with it; as throwing up from time to time relieves the stomach, and the child is disposed to take food, and does not seem so dull and heavy; however, as the food does not digest, and is chiefly returned unaltered, or else in hard curdled lumps, it can afford little nourishment; and what happens to pass the stomach will do more harm than good, by causing a griping and looseness; all which will, in the end, terminate as unfavourably as in the case of sickness without throwing up.

"This case of heart-sickness, as it is commonly called, when not accompanied with a throwing up, and which is very common to children in the first or second week, for the reasons already given, is not very generally understood; for when a child lies in a dull, heavy state, without motion, refuses his food, and, as is common in cases of heart-sickness, looks pale, sunk, and fallen, without any obvious and visible ailment, it is supposed undiscoverable, and that any means to relieve him will be needless and of no avail; however, from the description and account here given of it, it can scarcely be mistaken, and may as certainly be palliated, or entirely removed, by means here recommended.

"Children, with this complaint, will often have wind upon their stomachs, which becomes very troublesome to

them, especially in swallowing their food, and is occasioned by the same cause; namely, an imperfect digestion, as has been explained in the preceding article.

"Complaints in the stomach and bowels are commonly so connected, and interfere so much with each other, that it is sometimes difficult to disunite and properly distinguish The preceding complaints, of, and in the stomach and bowels, here treated of, are the most common and ma-In describing them, I have not been inattentive to what authors have said upon them; yet as some of them have not, so far as I know, been noticed by authors; and as they are frequently so interwoven, and depend so much upon each other, I have given and described them exactly in the manner and form they have repeatedly appeared to me in practice. And although description of the most simple complaints may, to those who are perfect strangers to them, at first sight, appear somewhat strange, and difficult to conceive clearly; yet, there can be little or no doubt, but that, by a careful attention to the descriptions here given, and a little acquaintance with the ways, appearances, and treatment of children, these will be clearly, properly, and easily discovered and distinguished. I have been more full and particular upon the complaints of the stomach and bowels, and the causes that produce them, than most of the other complaints of children; for which I need offer no other apology, than that they are the most frequent and fatal, and perhaps the least understood; or, at least, that they are seldom so properly attended to as their importance requires.

If due attention was paid to remedying and preventing these complaints, the advantages to society would be very considerable, as it would be a means of preserving a number of the species that we see daily dropping into an untimely grave; and with them, the fond parents' great dependence, and chief delight. If proper accounts were kept of the causes of the death of those children who are dry-nursed, and die under four months throughout the kingdom, it would, most likely, appear, that two-thirds or even three-fourths of them die of complaints in the stomach and bowels, evidently occasioned by a disagreement of their food. And if the same account of the causes of the death of those who die within the week from the birth, it would as likely appear that the same proportion are carried off by the same complaints, even if they are intended to be wet-nursed; and which happens from improper feeding before they get the breast.

"Of how much importance it is, therefore, to the comfort and happiness of the parent, and the ease of her tender and suffering infant, to have this article of the diet (frequently by an error in it, of such alarming and fatal consequences) properly regulated; and how much it behoves her to assert her just authority, in defence of it, against any other opinion that is directed by bigotry and ignorance; which generally, solely, govern and prevail upon these occasions!

"From what has been observed of the complaints in the stomach and bowels at this tender age, it seems highly probable, that, could those children who are intended to be brought up by hand, or dry-nursed, be but indulged with a breast for three, two, or even one month, from their birth, their stomachs and bowels would, in that time, acquire so much strength as to prevent the complaints, either altogether, or in a great measure.

"The Thrush, Frog, or Sore Mouth, is a complaint which children are subject to from the end of the first to the beginning of the third week. It is very commonly known

and distinguished by the name of a sore mouth, which it really proves to be to the poor infant, as it is mostly attended with a good deal of pain and uneasiness, especially in feeding, in sucking most particularly. The appearance in the mouth is, as if the child had been eating curds, and that some of them remained sticking upon the tongue, to which the complaint and soreness are at first chiefly confined; but afterwards it will spread all over the inside of the mouth, and be extended to the throat, stomach, and bowels.

"This is a very common and frequent complaint: when it happens, it proves troublesome, and ought therefore to be closely watched, that, when it appears, its departure may be hastened and expedited as quickly as possible. Whenever, therefore, any white specks, or matter like curds, are observed to be sticking upon the tongue, so fast as not to be readily washed or rubbed off, it may justly be supposed the sore mouth is commencing.

"If the child at this time is in the least disposed to be costive, a little manna or magnesia must be given to procure one or two loose stools; and which may be repeated afterwards, if the body does not keep gently open. It will be necessary to have the tongue frequently cleaned; for which purpose many things are recommended, as honey, borax, alum, white vitriol, &c. Borax is to be preferred to any thing else, as it is very effectual, and much safer than the others. It must be powdered, with or without an equal quantity of loaf sugar; and is to be made use of by tying a piece of linen rag upon the mouth or shank of a tea spoon, which must be dipped in the powder, and the tongue rubbed with it two or three times a day; and it must be regularly persevered in daily, while any appearance of the complaint remains; although, in doing it, the

child will receive some pain, especially if the complaint has been suffered to increase before proper attempts are made to remove it; but when it is taken early, and at the beginning, the mouth will be kept tolerably clear and free, without paining the child; by which he will be enabled to feed with much more ease, and the complaint will be got rid of, in a tolerable easy manner, in the course of seven or eight days. The colour of the specks upon the tongue are, as has been observed, at first white; yet it is very common for them, when the complaint is of some standing, to turn yellowish, and brown; upon which occasions they generally come off, at last, in sloughs.

"When, from neglect, or any other cause, the complaint has continued for some time, it is very common for the child to have a degree of fever, very often accompanied with griping and looseness, with watery, sour, green stools; in which case the disorder becomes more alarming and troublesome.

"As this complaint is occasioned by an imperfect or improper digestion of the child's food; so it is very liable to be brought on, and greatly aggravated, by improper food; it will therefore be very necessary to pay a strict attention to the diet at this time, if the child is dry-nursed; and to the mother's or nurse's diet, if otherwise.

"When the looseness is great, the complaint must be treated as a looseness from any other cause. Of all medicines, the antimonial puke is most eminently serviceable in this state of the complaint, and is often attended with the happiest effects, and therefore ought not to be omitted: it may be given once a day, while the complaint continues: as it commonly operates both upward and downward, it clears away the offending matter from the stomach and

bowels, which is the cause of the complaint, and also of the fever; by which means the most sensible relief is obtained.

"When the thrush is neglected, and suffered to continue until it is communicated to the bowels, (as it begins first in the mouth, and is extended gradually and regularly downward,) the stools will frequently be so sharp and acrimonious as to inflame the child's backside, and make it troublesomely sore; and which is the most certain proof and indication that the complaint has reached the bowels. When this happens, the parts that are red, inflamed, and sore, must be kept as clean as possible, and often washed with cold water. And, if the soreness increases, it will be proper to bathe them with lead water.

"The thrush is infectious; that is, it may be communicated to a child by a nipple that has been in the mouth of another child who has the complaint.

"The cause of this complaint has not been yet generally agreed on. During many years particular attention to it, I have scarce ever seen a case, when a child was dry nursed, without more, or less, of the complaint, but, most commonly with some severity, where means were made use of to remove it. On the contrary, I have never observed the least appearance of it where the child had no other food from his birth but the breast. I have frequently observed it when a child has been fed with improper food, till the breast was ready for him; and much seldomer when he has been so fed with more proper food. From which I have long concluded that the cause is improper food; and that the complaint may be ranked with many other injurious consequences (already named) from the same baneful cause.

"A yellowness of the skin, which very often overspreads the whole body, is very common with infants a few days after they are born; it sometimes continues for some weeks, during which time it often becomes of a deeper yellow, or orange colour. It is not to be regarded, nor is any thing needful to be done to remove it, as it will disappear totally and spontaneously at last. It is commonly said that the skin is left clearer and fairer by it than it otherwise would be without it; which seems a doubt: however, it is an agreeable delusion, and may help to reconcile so unpleasing an appearance.

Some children will have milk in their breasts a few days after birth, and which is commonly pressed out by the fingers of the nurse. If the breasts are much swelled and inflamed, this pressure, if forcible, will give considerable pain, and may be attended with worse consequences, and more uneasiness to the child, than can happen if nothing is done; and if the swelling is trifling, forcing out the milk is less necessary. In all cases, the pressing out of the milk is better avoided, and any swelling and hardness that may happen, will be better assisted by a little olive or goose oil rubbed gently on, once or twice a day; the milk being left to disperse or discharge itself naturally; the latter of which often happens, with the most trifling assistance; and whenever assistance by pressure is given, it should always be of the most gentle kind, and such as can give little or no pain.

Sore and Scald Head. By a sore head, is meant, a complaint, in some places known by the name of reef or felon: it often begins upon the forepart of the head, in large white scabs, which, if neglected, spread all over the head, and mostly break out upon the forehead and face, in large patches, at the same time: it sometimes, generally at the beginning, is dry; at other times it is moist, and has a thin discharge. Medical writers have named this complaint,

crusta lactea, or milky crust, from its appearance. The children of the lower order of country persons, who are gross and feeding, are most subject to it; and it seems to be occasioned by a want of cleanliness and exercise, which children, who have a bountiful supply of suck, require; but to which parents, in this situation, are not often disposed, or seldomer have opportunity to afford them. A cabbage leaf is a very common application, as it draws, and greatly promotes a discharge from the head, which is supposed necessary previous to the cure: but as such a discharge is no way necessary, and as it makes the head uncommonly offensive, it is better not to encourage it: and the sooner the complaint is cured, the better: for that purpose, take of brandy, and water, each equal parts; or one part brandy, and two of water; mix them together, and bathe the parts of the head and face where the complaint is, well, once a day, and immediately afterwards lay on a plaster of calamine cerate (commonly called Turner's cerate) spread upon a linen rag, which is also to be renewed every day after each washing with the brandy and water. Two or three doses of physic must be given during the cure. Bathing in the sea, will be of great use. (Try salt bath.) I have met with no cases which were not readily cured by these means, and with perfect safety to the child, notwithstanding the general practice is so much in favour of drawing, rather than repelling or drying applications. If a child takes physic. no inconvenience can attend the early removal of the complaint, as I am fully satisfied of, by repeated experience.

A child is liable to have this complaint in the first or second month, or afterward: it is uneasy to the child, and very disagreeable and offensive to the sight and smell. The applications must be continued while any remains of the

disorder can be discerned. If bathing in the sea cannot be complied with before or during the cure, it will be very proper, the first opportunity afterwards, to confirm the cure, and to prevent a return of the complaint. Oil-cloth (or oil-case) is often applied upon this occasion; but can have no other use, nor answer any other purpose, than keeping the cap clean, and preventing its sticking to the head. This complaint appears to be more peculiar to some parts of the kingdom than to others; probably depending upon the air and the mother's diet and habits.

"Children of about four or more years of age, are very liable to sore heads, that differ from the preceding; as the soreness is confined altogether to the head, except that it will extend to the neck if neglected. It begins in distinct brownish spots, that form a scab, and discharge a thick, gluey matter, that sticks amongst the hair. The spots increase and enlarge so as to cover a great part of the head. When these spots are discovered, the hair upon and about them must be cut as close as possible, and they must be washed well, every day once or twice, with soap and water. If that does not prove sufficient to remove them, they may be daily anointed with a little tar ointment, or Barbadoes tar, with the point of the finger; which rarely fails of a cure. The scald head, which is either this complaint in the extreme or nearly allied to it, may be treated in the same manner; and which will be going as far as can with propriety be attempted by females. (Try the tar ointment.)

"The Measles. The measles, like the small-pox, do not often attack young children, who will frequently escape, although the disease be in the same house with them. There are particular seasons of the year when the measles are most subject to be rife, or prevalent: the season which is the most common to them, is the spring.

"The signs, or symptoms of the measles, are a sickness; a heaviness; a thirst; a short, dry, husky cough, with hoarseness; a sneezing, and running at the nose; and a running and thin discharge from the eyes, which appear red and much inflamed, particularly the eye-lids; sometimes cold shiverings. These symptoms are commonly slight at first, and increase till the measles come out; which generally happens on the fourth day from the first attack, although children will frequently be much indisposed for a week before they come out. At the first appearance of the measles, they look like flea bites upon the face and neck, in distant spots; but, soon after, the face, neck, and breast, are covered in patches, resembling a thick rash that does not seem to rise above the skin, although it may be discovered by the touch, and feel of the hand, to be a little prominent or raised upon the face and breast, but not upon the other parts of the body. The measles, like the smallpox, come out first upon the upper parts of the body, and last of all upon the feet; and they observe the same progressive regularity in going off.

There is no disease, to which children are liable, that is so sickly, and attended with so much depression and dejection, as this; as it is very common for the most lively children to lay in a stupor, or state of heaviness and seeming insensibility, from the second day of the attack, during the whole of the complaint, which continues three days after the first coming out: on the third day, the eruption begins to look paler; and, on the fourth, goes off with a mealy appearance upon the skin. During the whole of the complaint, there is a smart fever, which often, with the cough, and a difficulty of breathing, increase in proportion as the disorder advances, and will sometimes be the most violent and severe at the height, or turn, of the measles:

sometimes the fever, cough, and other symptoms, abate; and the child recovers, in part, his spirits soon after the measles come out; but this is not often the case.

A child, in this complaint, must not be kept either very warm, or very cold: he ought not to be kept near the fire, nor yet suffered to breathe the cold air: it will be best to confine him to one room that is moderately and temperately warm; as much warmth will increase his heaviness, fever, and difficulty of breathing; and cold, and cold air, will add to his hoarseness, and make his cough worse. His drink may be water, barley water, milk and water, balm tea, or any weak liquor; but water, or milk and water, seem most agreeable to children at this time. What he drinks ought to be a little warmed, but not hot. Wine, and cordials, in all shapes, must be totally avoided.

These are the most material precautions which are to be observed on the first attack of the measles; and although it is not always thought necessary to have recourse to medicine, and medical advice and assistance, yet they may frequently be employed to great advantage. It will always be proper to give something at the beginning, to procure two or three loose stools; as, the infusion of senna and prunes, or manna: rhubarb, in any shape, is not very proper. Bleeding, with leeches, or with the lancet, has been thought necessary, particularly when the cough is severe and violent. My experience has not discovered any advantage from bleeding, but on the contrary, injury. It is not here intended to give a regular and exact account of the medical treatment of the measles, which would be of little use in a domestic line, and might perplex and embarrass; but as bleeding is so general a remedy, and sometimes had recourse to rather incautiously in this complaint, a caution respecting it may not be unseasonable, especially

as cases have happened where the incautious and too hasty practice of it has been attended with unfavourable consequences. When bleeding is used before or at the time of the coming out of the measles, it will often check and retard the eruption, and will sometimes cause it to strike in; the consequences of which may prove fatal: therefore, bleeding ought to be very cautiously ventured upon.

"Blisters, applied between the shoulders or to the sides, have been found of great use in abating the cough and relieving the breathing, and may safely be applied at any period of the disease, when the cough and breathing require it. (Try cupping the sides and back.)

"A fever always accompanies the measles, and is the cause of the drowsiness and stupor which children always have in the beginning, and often during the whole of the complaint. Nothing will so sensibly check and abate this fever, remove the drowsiness, and restore a child's spirits, as repeated doses of the antimonial puke; it may be begun with on the second or third day after the sickening of the child, and after the stools have been procured as above directed, and repeated, once a day at least, while the fever and heaviness continue; it will be particularly proper to give it in the evening, at which time the fever is commonly most severe; and if it operates, as it generally does, both by vomit and stool, it will give most sensible relief; the fever, heat, and oppression, will be considerably abated; and the child will be much more easy and cheerful, and more tranquil, calm, and settled and composed, than before he took it.

"The fever and cough will very frequently continue, without much abatement, for a few days, or a week, after the measles are entirely gone; but which, the fever especially, may be greatly relieved, or entirely removed, by

opening physic; a dose of which may be given as soon as the measles are turned; and repeated once, or twice, in the course of a week. The stools, which come away with the physic, are generally very offensive, and the matter of which they are composed is, while it is retained in the bowels, sufficient cause for the fever; and it may reasonably be supposed to be the cause, when the relief, that is obtained by the discharge of it, is considered; as the fever is sensibly subdued by the operation of the physic; and it is on this account that repeated doses of physic are found so requisite after the measles; and which they are as much, or even more so than after the small-pox. It may always be known that the fever continues, while the dulness, thirst, and want of appetite remain; and, during which time, the physic ought to be given, at proper intervals, if no other cause forbids it. It may also as certainly be known that the fever is gone off, when the child's spirits and appetite return; and which when they do, the physic may be discontinued. The danger from the measles is much increased when they happen to be connected with the small-pox or chincough; and therefore, so circumstanced, they require more medical attention than is generally bestowed upon them.

"The eyes, and particularly the eye-lids, will sometimes remain sore, swelled, and inflamed after the measles. The cough also, will oftentimes continue for some time after the fever and every other remains of the measles are gone. While either of these complaints of the eyes, or the cough remain, the child ought not to be suffered to go out of doors, or be exposed to the cold; as the air, of a cold season particularly, is very apt to add to and greatly aggravate these complaints, and may make them very troublesome and tedious. Too much caution, therefore, in avoiding

cold, cannot be observed while there is any remains of sore eyes, or cough. It is well known that the measles sometimes leave behind them coughs and sore eyes, that continue for life; a great part of which are occasioned by the single circumstance of going out too soon; and which a little caution, and seasonable confinement within doors, would prevent.

"When these complaints are confirmed, and of long standing, they seldom admit of a complete cure: they are sometimes relieved by issues, and a warm climate. Blisters, behind the ears, and to the back of the neck, will frequently relieve the eyes, if they are not delayed too long; it will often be needful to repeat them frequently, to receive much benefit from them. It is better to suffer the blisters to heal up, and to apply fresh ones, than to keep one constantly open by the means commonly made use of for that purpose." (Try frequent dry cupping.)

"Of Cholic. Some children are very subject to cholic, which is easily discovered by sudden fits of crying or screaming, which nothing can appease, the child bends back the body, spurs with the feet, and then has an abatement of the pain for a few minutes, obtained sometimes by the discharge of wind. An attack may consist of one uninterrupted fit, or of repeated screaming, with intervening moments of ease. Cholic may only occur occasionally, or it may occur almost every night. It may be induced by costiveness, by cold, by damp clothes, by the liberal use of panado, particularly if the bread has been a little sour, by passion, or some state of the nurse affecting the milk, by collection of wind in the bowels; or it may accompany thin and slimy purging, which is sometimes produced by the injudicious use of laxatives.

" In ordinary cases, nurses give gin and water, which

is a most injurious practice, and may in some instances kill the child. Laudanum gives speedy relief, but it weakens the stomach and nervous system, and produces costiveness. A few drops of tincture of asafætida, mixed with oil of anise, is generally effectual, and is always safe.* The warm bath is useful, and if these means do not give relief, rubbing the belly with laudanum will be safer than giving it internally. A clyster of gruel, salt, and a little oil, is proper; and if the child has been costive, it will be right to give a tea-spoonful of castor-oil, after these remedies have relieved, in order to prevent a return. (Try hot cloths from hot water to the belly.)

"When children are subject to cholic, we may suspect that there is something wrong in the diet. Common panado, especially if it contain much sugar, is very apt to have this effect. The nurse's milk may also be flatulent, and this bad property is sometimes increased by the use of porter or ale, intended to increase the quantity. The state of the child's bowels must be attended to, and he should not be allowed to load the stomach, by taking too much at a time. If he discharge wind upwards after sucking, he should be gently dandled, as it promotes expulsion. I am no advocate for giving much medicine to children, but when these means do not succeed, it is proper to give occasionally a few drops of the mixture mentioned in the note. (The fundament should be kept open, by introducing a covered quill, as before suggested.)

"In the more violent and dangerous kind of cholic, the belly is tumid and painful to the touch, to a greater de-

^{* &}quot;Two drams of tincture of asafœtida, twenty drops of oil of anise, and an ounce of mucilage of gum arabic, may be rubbed up together, and of this mixture, from ten to twenty drops, in a little water, will be a proper dose."

gree than in the former species; the child is hot, the pulse quick, the face flushed, the pain and screaming violent, and sometime there is a great pressing, and nothing is passed but bloody slime. As this may proceed from inflammation or obstruction in the bowels, it evidently is too serious to be committed to unprofessional management. I may only observe, that if the child be costive, or have not lately had a looseness, means should be taken, if the practitioner be at a distance, to procure a stool by a clyster, and the use of castor-oil or calomel, at the same time that the child is put into the warm bath, and rubbed with laudanum. If the bowels be open, a clyster containing a little laudanum, can seldom be improper, if medical aid cannot be early obtained. (Also try the antimonial puke.)

"Of Convulsions. Convulsions take place at any age, and may occur either in the course of some other disease, under which the child has been labouring for some time, or suddenly, in a state of previous health. In the one case they are highly dangerous, and often indicate a fatal issue; in the other, they are frequently attended with little hazard. Convulsions, or draughts, as they are called, vary in degree, from a slight movement of the muscles of the face, to a rigid, or convulsed state of almost the whole body. In general, whatever be the degree of the movement, the countenance is altered, both in colour and expression, and the patient is insensible, and cannot follow an object with the eye. In some instances, the motion is so slight, that the child may rather be said to be in a state of fainting, or stupor, than of convulsion. In very young infants, there is sometimes only a smile about the mouth, the eye, which is half closed, turns slowly round, the breathing seems occasionally to flutter, and the child starts, and throws out the arms on the least noise. These motions, called inward fits, frequently proceed from wind in the bowels.

"Convulsions vary in point of duration, as well as of violence. They sometimes go off in a few seconds; in other instances, they continue for several minutes. The child may have only one short attack, and become well immediately afterwards, or he may remain in a languid, sleepy state; or he may have repeated attacks in a very short time, and continue insensible during the whole of the intervening period. Convulsions may be produced by wind, or irritation in the bowels, dependent on worms, costiveness, indigestible food, acrid stools, &c.; or by teething; or by breathing bad or confined air; or by the striking in of some eruption; or during the coming out of others, such as small-pox; or by affections of the brain itself; or by other spasmodic diseases, such as hoopingcough, &c. I shall not enter, however, into any minute consideration of the causes of convulsions, or professionally into the principles on which the different points of practice depend. It will be more useful to observe,

"First: That when the child has been ill for some time before convulsions come on, especially if the pulse has been quick, the skin warm, and the head affected, whilst these symptoms could not be traced to the effect of teething, there is ground to believe, that the convulsions proceed from a diseased state of the brain, most probably from water in the head. It is to be hoped, that every attentive parent will, from their previous symptoms, have been led to procure for their child professional advice, before this period of the disease.

Second: In the case of very young infants, if there have been no preceding disease, there is great reason to attribute the convulsion to the state of the bowels: and

we shall be confirmed in our opinion, by finding that the stools are not of a good appearance; that there is much wind in the bowels; that the child has not been nursed or fed properly; that the nurse has been agitated by passion, or committed some irregularity in diet; or lastly, in infants a few days old, that the meconium is not expelled.

"Third: When young infants have convulsions from the state of the bowels, we generally find, that the face is pale, and the motions slight; but if they proceed from the state of the brain, which is still more alarming, the motions are stronger, and more deserving of the name of convulsion.

"Fourth: At this early period, children, from an irritated state of the navel, when the cord drops off, and also from affections of the nervous system, may have locked jaw, and the spine stiffly bent back by a convulsion.

Fifth: After the child is two months old, irritation of the bowels, proceeding from bad stools, worms, or indigestible food, does not produce those gentle motions, or that apparently languid state, observable at an earlier period, but generally excites pretty strong and well marked convulsions; and therefore, after this time, the distinction mentioned in the third observation will not hold good.

"Sixth: At the period when children are teething, convulsions may be produced by irritation of the gums, more likely than by other causes; and therefore, we should in every case which occurs at that time, examine carefully the state of the gums.

"When a child is seized with convulsions, a great consternation immediately prevails, and without some determinate rules, either nothing will be done, or very contradictory plans may be adopted.

"The first general rule in such cases, is to order the te-

pid bath, which is proper in every instance. When the motion is strong, it always allays it; when it is slight, it brings on a quiet state of repose. The water should be agreeably warm to the hand, and the child be kept in it up to the neck for some minutes, if he do not get relief sooner. If he be very pale or languid, the addition of a table-spoonful of mustard or hartshorn to the bath is useful.

"Second: Whilst the child is in the bath, a common injection is to be prepared, and administered immediately after he comes out; and afterwards a dose of calomel proportioned to his age, is to be given.

"Third: If the child seems to be sick, or oppressed in the breathing, or about the stomach, or has been known to have had something which has disordered the stomach, vomiting should be excited, by tickling the throat with a feather, during the fit, or giving ipecacuanha, as soon as the child can swallow.

"Fourth: After the child is taken out of the bath, it will be useful to rub him, particularly over the spine and the stomach, with oil of amber, or with spirits, having about a sixth part of hartshorn added. If any rash has struck in, rubbing the surface with camphorated oil of turpentine, or applying a small warm plaster over the stomach, will be useful.

"Fifth: If the gums be swelled, or there be any appearance of teething, the part should be instantly scarified.

"Sixth: If these means do not speedily restore the child, or if there should be a repetition of the fit, or the child does not completely recover, then we must take measures for preventing the recurrence, or restoring health. If the face be flushed, or the head be large, or the child remain insensible or stupid, one or more leeches, accord-

ing to the age, must be applied to the temples. The head ought also to be shaved, and covered with a blister. At the same time, it will be proper to give such doses of calomel, as keep the bowels very open. This is more especially necessary, if the stools be fetid, or of an unnatural appearance. If the child remain languid or insensible, it will be of benefit to rub the surface frequently with oil of amber, strong spirits, or camphoretted oil of turpentine. When there appears to be much irritation, rubbing the back-bone with laudanum is proper, but no opium should in general be given internally.

"When there is a tendency to frequent returns, it will be proper, besides keeping the bowels correct, by means of calomel, or rhubarb and magnesia, to give repeatedly a few drops of tincture of asafætida, mixed with oil of anise. In all cases, the strength is to be supported by suitable nourishment, even by clysters of beef tea.

"Seventh: The directions I have given, are particularly applicable to the convulsions of children above a week or two old. I may add, that although the same remarks may often apply to those who are younger, yet in general, the convulsions or inward fits of infants a day or two old. require chiefly gentle laxatives, such as magnesia and rhubarb, or calomel, and sedulous attention to nourishment, with gentle friction over the surface, especially of the belly, with camphoretted spirit of wine.

"Eighth: When fits are apprehended in dentition from starting, feverishness, and other circumstances, ascertained by former experience, to have preceded convulsions, the gum should be cut, and a gentle emetic exhibited. Laxatives and the warm bath are also useful, and these means generally prevent the fit.

[&]quot; Of Fever. Fever, proceeding from different causes, is

a frequent disease of children. I have already noticed that produced by the irritation of teething, and now proceed to describe another species, very common, and exceedingly obstinate, if not early attended to. It is either produced speedily, after eating some improper and indigestible food, or the foundation is laid more slowly, by a previous state of costiveness, or disordered condition of the bowels. In the first case, it sometimes attacks very suddenly, after eating unripe fruit, or garden trash, or almonds, or pastry, and particularly that kind of cake, called short-bread. In other instances, the symptoms do not come on for a day or two. The fever generally begins in the afternoon, the child is not disposed to eat, is peevish, the hands are warm, and the pulse is quick. He complains when touched, although not hurt, and can hardly tell why. In the evening he becomes sick, or vomits, is very hot, restless, and thirsty, but generally the tongue is clean. Through the night he is much disturbed. Next day the tongue is furred or white, but he is rather better and livelier in the morning. In the afternoon, however, the symptoms increase, and the disease goes on as the variety, which I shall next describe. In some instances, the disorder attacks more speedily. The child perhaps, when going out, complains a little of the head, becomes worse when walking, and returns, crying with pain in the forehead, is pale, hot, and the pulse quick, and if not soon relieved, has a very serious and obstinate fever established. The headache in this fever depends on the state of the stomach. It goes off at times entirely, but always returns before a fit of sickness or vomiting.

There can be no doubt as to the cause of this disorder, and there is little difficulty in checking it at once, by giving, on the first appearance of indisposition, a dose ρ f ipe-

cacuanha, and afterwards a smart purge. If the emetic be delayed for some hours, or till next day, it may mitigate, but seldom entirely removes the disease. It is astonishingly difficult often in these fevers, to move the bowels. Large doses of physic produce very little effect; often, after being retained for some time, they are vomited. In this case, they must be assisted with injections.

"The other variety, the consideration of which will include the farther treatment of the last disorder, begins often more gradually, the child being for a day or two unwell, before he be altogether confined to bed. In the day time, he has several attacks of feverishness, during which he is dull, languid, and disposed to lie down or sleep. In the intervals, he seems pretty well, but is easily put out of temper. The appetite is whimsical, and he cannot eat what he asks for. He has little thirst, and at this time the tongue is pretty clean. The bowels are generally bound, but sometimes loose, and in this case, the stools are offensive. These symptoms may continue for a day or two, or even for a week, before the child becomes so ill as to keep his bed, or to have a formed complaint. Then an acute paroxysm of fever takes place, generally preceded by shivering, and attended by vomiting; the pulse becomes very quick, and runs so high sometimes as a hundred and forty in the minute. The cheeks are flushed, and the patient drowsy, but he has no pain in the head, nor any where, unless, perhaps, in the belly; for in some cases, he is sadly tormented with gripes, or even fixed pain in the bowels. The tongue now becomes foul, and the bowels appear to be very torpid, the appetite is totally lost, or what food is taken, is not digested. The stools are fætid, dark coloured, sometimes like pitch, or thin and olive coloured, or green and curdy looking. The breath is offensive. There is a great desire to pick the nose and lips, so

that sometimes, if the child be not watched, an ulcer may be produced. The fever does not continue alike severe, during the whole day, but becomes less at times, though not at any stated hour. Each exacerbation is attended with drowsiness. The face is occasionally flushed, and the eyes suffused; at other times it is pale, and the eye dull and white. Generally delirium occurs in the course of the disease, but by speaking to the child he can be recalled from this, and answers correctly; or although sometimes delirious, yet for an hour or two, he may be tolerably distinct, and insist obstinately on being carried out. The debility in many cases is excessive, the child picking the bed-clothes, whining in a fatuitous manner, and staring vacantly; yet even in this state, he may often be roused, and seems to understand, at least so far as to reject what he dislikes. This disease runs on for a week or two, or even for several weeks, during which time, the appetite is very trifling, the thirst not urgent, the strength exhausted, the body wasted, and the feverish symptoms varying a little, but not greatly, in degree. If the fever continue obstinate and violent, the belly become swelled, and the debility and stupor increase, the danger is great.

"This fever bears a resemblance to dropsy of the head, especially in the commencement. But in hydrocephalus, there is more frequent vomiting, and the pain in the head is generally severe; whereas, in this fever, there is either no pain, or it is evidently connected with the state of the stomach. By a general and careful comparison of the two diseases in their progress, a practitioner, in most instances, may form a correct distinction.

"It is generally proper to commence the treatment of this disease with an emetic of ipecacuanha, succeeded by a brisk laxative. This practice, if adopted during the state of indisposition which precedes the complete formation of the fever, will cut short the symptoms; and if laxatives be afterwards administered, till the bowels are brought into a correct state, a perfect recovery is the consequence. If, however, the fever has fairly taken place, we cannot expect immediately to remove it, but must be satisfied with a slower process. The great remedy, still to be depended on, for mitigating the disease, and abridging its duration, is purging, which is proper in every instance; for if the patient be not costive, the stools are at least unnatural. In some instances, the usual doses of medicine will be sufficient; but often the bowels are so torpid, that much larger doses will be required. This is a point of practice, which requires discrimination; for if the dose be not sufficient in quantity to purge, or if it be not repeated, so as to evacuate the morbid contents of the bowels, we come short of our object. On the other hand, if the purging be carried farther, we weaken our patient, injure still farther the intestines, and may bring on an irrecoverable loss of tone, so that the bowels are expanded with wind. Two circumstances will direct us in this matter; the state of the stools, and the effect on the pulse and on the strength. When the stools are fætid, or unusual in colour or appearance, purgative medicines are not unnecessary. When these remedies do not exhaust the patient, and render the pulse more frequent and smaller, they do good, and have not been pushed too far. With regard to the dose, that ought to be no greater than is adequate to the effect. At first it is useful, and often absolutely necessary, to give one or two brisk and large doses, but afterwards, it is usually better to give only such doses as will keep the bowels open, and support their action. Where there seems to be much irritation or pain of the the bowels, an opiate clyster may be also given occasionally, and with much advantage. The belly is likewise, if there be much pain or griping, to be fomented, and rubbed with anodyne balsam.

"During the use of purgative medicines, worms are frequently expelled, which has given rise to a belief, that they occasioned all the symptoms, and hence this has been called a worm fever. That they may increase the disease, or, if in great quantity, may immediately produce it in some instances, I allow; but in many cases, they never appear, and therefore the appellation is improper. Whether they exist or not, is not of so much consequence, as may at first appear; for it is by all admitted, that the cause of the fever consists in a morbid state of the bowels, and that this is to be removed by purgative medicines, which are equally good for expelling worms.

"But although purging, under the restrictions I have made, be a proper practice, yet it is not the whole of our practice. In the early stage, we employ such other means as allay fever. When the heat of the skin is considerable and steady, sponging the surface with cold vinegar and water, is of service. If this give much relief, and for a few minutes bring down the pulse, and abate the heat, the cold affusion of water may be safely practised; but it is not to be repeated oftener than once, if it do not give more than usual relief; nor is it to be employed with expectation of permanent advantage, unless immediately after the hot stage have been fully established.

"When the sponge does not give relief and comfort, and the skin is hot and parched, a little antimonial wine is useful, not to bring out a copious perspiration, but a gentle moisture, or softness on the surface.

"From first to last, light and nourishing food must be given, in such portions as the patient can take. Beef-tea, arrow-root, &c. are very proper. Toast-water, whey,

milk and water, lemonade, ripe fruit, &c. are useful for quenching thirst.

"Great attention is to be paid to cleanliness and ventilation; and when convalescent, a removal to the country is of much benefit, in confirming the health, and removing hectic appearances, and copious nocturnal perspiration, which often succeed this disease.

"Young infants are subject to a variety of this fever, which begins with loss of appetite, restlessness, fretfulness, hot skin, quick pulse, and continual drowsiness, with bad smelled breath, and appearance of being hurt if touched or moved. There are generally distinct remissions, during which the child is easier, and takes the breast. There is no appearance of teeth, which distinguishes this from teething-fever. It is more apt to be mistaken for dropsy of the brain; but in that disease, there is more impatience of light, heat in the head, screaming, or awakening suddenly and in terror, &c. and in the advanced stage, the symptoms of oppressed brain are evident. The treatment is to be conducted on the principles already laid down, particularly by procuring stools; for it will generally be found, that the bowels have been previously costive, or in a bad state.

"Children are also liable to the common nervous, or typhus fever, if exposed to contagion. It is not unusual, when this disease gets into a family, where ventilation and cleanliness are neglected, for it to attack in succession every one, from the eldest to the youngest. It approaches generally in a slow manner; the child looks pale and wan for a day or two, the appetite is impaired, the sleep unrefreshing, the skin of a dirty appearance, and the tongue white. Then a chilly fit comes on, or, without any great sense of coldness, the fever invades with a feeling of weariness and oppression, the pulse becomes frequent, vomiting or squeamishness comes on, the head is painful, the skin

hot, and the eye dejected, or sunk. These symptoms have generally a remission, once in the twenty-four hours. If the disease gain ground, the weakness increases, the pulse becomes more rapid, delirium takes place, and then the child sinks into a state of stupor, the eyes are half closed, the teeth covered with a black crust, and the stools are passed without knowledge. This state soon ends in dissolution. The disease may continue a fortnight, or three weeks, or even longer.

"This fever is to be attacked at the very first with an emetic, succeeded by a pretty smart purge. If the skin be very hot and dry, and the child do not at the same time feel any chilness, the affusion of cold water will be very serviceable in the early stage. But if this be neglected, or not practised, then we are to sponge the surface with cold water and vinegar. If the head be painful, one or two leeches, according to the age, are to be applied, in the beginning, to the forehead; and if the pain continue, and delirium approach, the head is to be shaved, and a small blister applied. If the skin be parched and hot, and the sponge afford no permanent relief, saline julap, with a little antimonial wine, will be proper. The bowels are, during the whole progress of the fever, to be kept open, and occasional purges are of much benefit, when the stools are offensive or unnatural. When there is much oppression, and a dry, foul tongue, a smart dose of calomel often gives much relief, by evacuating dark bilious stools. The diet should consist of stewed apples, beef-tea, panado, &c.; but in general, very little is taken. Gruel, toast-water, or lemonade, form proper drinks; and ripe fruits, are both grateful and useful. In the advanced stage, cordials, particularly wine, should be given prudently.

"When the fever abates, care must be taken to prevent any considerable exertion, or any error in diet, either of which might cause a relapse. Nothing confirms the health, or removes the consequences of fever, so effectually, as going to the country.

" Of Worms. Worms of different kinds, are found in the bowels, but there are chiefly two, met with in children, the lumbricus, or long worm, having a general resemblance to the common earth worm, and the ascaris, or small white worm, like a bit of thread. These two kinds inhabit different parts of the bowels, for the small worms are confined to the under part, or straight gut, whilst the lumbrici are found much higher. It is extremely difficult to account for the production of worms, as they are totally different from those found in the earth, or on vegetables. It is evident, that they cannot be of external origin; but how they come to exist in the bowels of a child, is a very difficult question to answer. It has been popularly supposed, that particular kinds of food, or sweat-meats, or unripe fruit, breed worms; but this is only true, in so far, as these disorder the stomach and bowels, and weaken their action; for worms rarely appear, when the action of the bowels is vigorous. It is also observable, that few infants have worms, till after they are weaned, which is to be accounted for on the principle, that the bowels are in better order during suckling, than afterwards, when the diet is more varied, and indigestible.

"Worms may exist without producing any symptom, until they either accumulate in considerable quantity, when they cause more or less irritation in the bowels, or some slight indisposition takes place, and they, by their irritation, increase it. All the injury they produce, is that of irritation, but the degree of this, and the effects of it, must vary, not merely according to the number of worms, and their movements, but also according to the state of the bowels themselves. It is also to be remembered, that as a

weakened state of the bowels is favourable for the accumulation of worms, many of the symptoms may proceed from that state alone, independent of the new irritation.

The long worms may be suspected to exist, when the child complains of frequent griping, or pain in the belly, has repeated and unexpected attacks of looseness, variable appetite, being sometimes seized suddenly with extreme hunger, has swelling of the belly, especially at night, disturbed sleep, frightful dreams, and grinding of the teeth. Besides these symptoms, we also observe, that the countenance is alternately pale and flushed, he picks the nose, has fætid breath, dry cough, and sometimes slow fever, or convulsive affections. These symptoms may exist in different degrees, and are ultimately attended with the expulsion of worms, either by vomiting or stool. It has been supposed that a very obstinate and protracted fever, called worm fever, might also be produced, but this generally depends more upon costiveness, or a deranged state of the bowels, than simply upon worms. I have already noticed its symptoms and treatment, and also its resemblance to a most formidable disease, the water in the head.

"A variety of worm medicines have been employed, such as tin powder, tansey, sulphur, hellebore, worm seed, cowage, indian pink root, &c. In general, however, we find, that with children, the most successful plan is to give frequent and repeated purgatives, to expel both the worms and morbid stools, and also to excite, and support, the due and vigorous action of the bowels. For this purpose, the occasional use of a suitable dose of calomel, and the regular employment, on the intermediate days, of aloetic pills, if the child can swallow them, will be effectual. The extent to which this plan is to be carried, and the period for which it must be continued, will depend on the effects produced. As long as the stools are fætid, and unnatural in

appearance, or as they contain worms; and as long as the medicines invigorate, instead of weakening, we may be sure that it has not been carried too far. Under it, the appetite increases, and the health and looks improve.

"Small worms, besides producing griping, paleness, pricking of the nose, disturbed sleep, &c. are discovered by the itching they produce at the lower part of the bowel. This is greatest at night, and sometimes exists to an intolerable degree; and from the irritation excited, even retention of urine may be caused. We are also confirmed in our opinion, by frequently observing the worms in the stools, and sometimes, they even, spontaneously, creep from the bowel. This kind of worm is removed like the last, by smart purgatives, and prevented from being increased, by strengthening remedies. But besides these means, we possess the power of applying to that part of the bowel which they inhabit, substances directly in the form of clysters, capable of killing them. For this purpose, the common salt injection is useful; but one, containing aloes, or consisting of salt, oil, and a strong decoction of chamomile flowers, will be still more effectual. It may be given every second night, for some time; afterwards, once a week as long as any symptoms remain.

Of Mumps. This disease is a swelling of the gland which lies before the ear. It is infectious, and begins with chilness, succeeded by heat, frequent pulse, thirst, and headache. Very early, a small tumour can be discovered near the angle of the jaw, which presently increases, so that not only the back part of the cheek, but the side of the neck becomes swelled, and the jaw is stiff. There is, however, no sore throat, and seldom any difficulty, either in swallowing or breathing. The swelling gradually abates about the fourth or fifth day, and the patient soon gets well. This is a very slight disease in general, and nothing

farther is required, than keeping the part moderately warm, by means of a piece of flannel, and abating the fever by spare or vegetable diet, and a purge.

" Chicken pox. The chicken pox is preceded by feverish symptoms, such as chilness, quick pulse, hot skin, restlessness, diminished appetite, thirst, and headache. In some cases, the fever is severe, and attended with distressing retching, great agitation during sleep, and even delirium. In others, it is scarcely perceptible. On the third day, the eruption appears, first on the body, and then on the face, and lastly on the extremities; when the eruption appears, the fever declines. The pustules, which are very itchy, early contain a yellow matter, or liquor, and by the fifth day are covered with scabs, which leave no pits. There are different varieties of this disease, for in some the pustules are larger than in others, or go off sooner. This is scarcely ever dangerous, and is seldom even troublesome; nor is it generally necessary to confine the patient, or do more than give one or two doses of gentle physic. The fever and uneasy feelings may be greatly mitigated, and the eruption rendered slighter, by washing the surface with cold water in the commencement of the disease. The itching may be abated afterwards, by sponging the skin occasionally with cold vinegar and water. some cases, especially if the bowels be neglected, and the child be allowed to feed grossly, the fever may be strong, and the pustules become much inflamed. Some of them may even end in sloughs, which leave deep marks, worse than those of the small pox, and as in that disease, so also in this, very troublesome boils may harass the patient for a long time. This is chiefly the case in bad constitutions. I have mentioned the causes; and the cure, or mean of prevention, evidently consists in the use of laxatives and light diet.

"Cow-pock. The cow-pock consists of a single vesicle, which appears where the matter is inserted. The colour is dull white, but it is red at its edges. It contains a fluid as clear as crystal, about the eighth or ninth day. A redness or inflammation of the skin spreads to a little distance from it, about the size of half a crown. This begins to fade on the eleventh or twelfth day, and the vesicle becomes brown, and presently is covered with a glossy, hard scab, which discovers, when it falls off, a permanent scar. Now we have here, first to consider where the inoculation should be performed; and secondly, if it be complete in its effect.

"In boys, it is of little consequence where the vesicle is seated, and the arm is as good as any part; but in girls it is better to inoculate on the outside of the thigh, a little above the knee. Upon the second point, there has been a difference of opinion. Parents cannot too generally know, that the arm may inflame, and yet the vesicle may not be of the genuine kind. If the progress be different from the usual course, then there is always a doubt, lest it may not give security against the small-pox. If, for example, there be no red circle, or if, on the other hand, it appear early, for instance on the fifth or sixth day, and especially, if the vesicle be not round or oval, but jagged or irregular, and contain, on or before the eighth day, a turbid or white, instead of a clear fluid, it will be necessary to re-inoculate. It is possible also, that the vesicle may be of the genuine kind, but the constitution may not be fully affected by it. This cannot be determined by appearances or symptoms, but it may be by a very innocent and slight test. If on the morning of the sixth day, a second inoculation be performed on the other arm or leg, it will advance quickly, and become surrounded with a red circle, nearly as soon as the first vesicle will be. If this trial be neglected, we still have two other methods of determining, if the constitution be properly altered. The first is, by inoculating with vaccine matter, any time after the child has recovered completely from the first inoculation; the second is by using small-pox matter. In either case, the scratch only inflames a little, it soon heals, and no other effect is produced. Without one or other of these tests, no child can be pronounced secure, for I have seen small-pox succeed cow-pox, where the vesicle had all the genuine characters, and had run its course regularly. In such cases, the small-pox has been mild, though the pustules have been copious, and contained as much matter as usual. If it be asked, why every parent does not re-inoculate as a test, I can only answer, that it is from the same cause which makes many neglect insuring their property, namely, a belief that there is no great chance of its taking fire.

"It has been urged as an objection against the cow-pox, that it produced cutaneous diseases afterwards, but this is groundless. Small-pox, on the other hand, may be succeeded by the most troublesome boils, and may irreparably affect important organs, or the whole constitution.

"With regard to the treatment of cow-pox, I have nothing to observe, except that the part should, when the circle forms, be dusted frequently with flour or chalk; and after the vesicle breaks, the same should be continued, in order to form a crust upon the sore, which is much better than dressing it with ointment.

"Of Chilblains. Chilblains are too well known to require description. They are produced by the exposure of the extremities to cold and damp, and particularly, by suddenly warming them after they have been thus cooled. The mode of preventing them, will therefore be evident. The extremities are to be defended from cold, by warm gloves or stockings, and preventing the child from sitting with them wet; a hasty approach to the fire is also to be

avoided. When they are produced, the best remedy is the frequent application of camphorated spirit of wine, and the further operation of the causes which gave rise to them must be checked. If they have ulcerated, the best dressing is made, by mixing an ounce of basilicon, with a dram of finely powdered camphor. It is to be spread thin on linen." (Try lead ointment.)

Of Scalds and Burns. These have been variously treated, with heating and cooling applications; lastly, with coverings of cotton. It is unnecessary to enter into a particular account of the treatment to be pursued in extensive burns; but I will remark, that the course pointed out by nature is unquestionably the best: keep the part in cool water, or vinegar and water, until the pain subsides. When this is ended, the parts may be bathed with sweet oil, or covered with lead ointment, or a little white lead sprinkled on them; the dressing to be repeated three times a day. Powdered chalk may be sprinkled on the sores, when they have what is called proud, or fungus flesh. When blisters arise, they are to be opened, by sticking in a very sharp needle, not tearing them open, so that the water may gradually pass out, without letting in air to irritate.

"Itch. The itch is a contagious eruption of small pustules, having a hard hot base, and watery looking top, too well known to require any minute description. The itching is intolerable, and the scratching produces considerable inflammation, which frequently spreads from one pustule to another, and occasionally small boils are formed on different parts of the body. It is not dangerous if properly attended to, but if neglected, the excessive irritation is apt to injure the health. The best application is an ointment composed of sulphur, two drams of powdered hellebore, and three ounces of hog's lard, or oil of Bays. It is not necessary nor useful to give sulphur internally; but

in inveterate cases a purge or two is beneficial. When the sulphur fails, or is not employed on account of its smell, other remedies have been used, such as a strong decoction of juniper berries, or of hellebore, or a solution of ten grains of corrosive sublimate in eight ounces of spirit and water. These are to be applied as a wash to the parts, three times a day, and the strength increased or diminished, according to the effect. Hellebore ointment, or a scruple of corrosive sublimate mixed with two ounces of lard, or ointment of nitrated mercury, have also been employed in place of sulphur ointment.

"Great attention to cleanliness, and frequent ablution, are necessary during the cure. An eruption which sometimes succeeds the itch, or is excited by the friction, and which is itself not very itchy, is generally removed, simply by washing morning and evening with soap and water.

"The dry itch, is a very different disease, and is not nearly so contagious as the former. We cannot always say what produces it, but we know that negligence is favourable to its appearance. In children it begins in different parts of the body, with small reddish spots, having a little blister at the top, which is soon converted into a thin scale, very like a bit of dried herring scale. Between the scales, which are often numerous, we may observe shining or siver-looking patches on the skin. After this cruption has continued for some time, the skin, especially on the hands and feet, becomes red, as if it had been scalded, and is partly covered with scales, scabs, and scurf. some cases, the skin of the whole body is red, inflamed, and partially excoriated, discharging a small quantity of glutinous matter, which stiffens into scales, &c. The head is always covered with scurf, and very often the nails are destroyed. The eruption is itchy. The daily use of the tepid bath, or a bath of warm sea water, or a mixture of

an ounce of liver of sulphur, and a gallon of warm water, will be useful. Butter-milk, lime-water, solution of sal ammoniac, or corrosive sublimate, or decoction of hellebore, recommended above, are useful lotions, or the same ointment employed in the itch may be used.

Summer Complaint. This disease, cholera infantum, is a disease carrying off annually, thousands of the children of this country, particularly of the towns. It generally appears in June, a few days after the hot weather commences. It is a fever arising from the heat and change brought on in the atmosphere: by the change in the season, attended with obstruction in the liver, which causes the copious secretions in the stomach and bowels. The matter thrown up from the stomach, and discharged from the bowels, varies in almost every case.

This disease is certainly to be prevented, by carrying the children to the country in the beginning of the season; by daily riding them out every morning before the heat of the day is considerable; and by keeping them in the coolest part of the house. One of the best institutions for our summers, productive of incalculable good to this country, would be the establishment, in our towns, of two horse waggons or carts, to take all the poor children about a mile into the country, every morning; and whether to remain there or not until night, in all probability, the bowel complaint would be effectually prevented, and their constitutions effectually strengthened. I have long been so deeply impressed with the vast importance of this daily exercise for children, especially in the beginning of hot weather, that when unable to procure a carriage, for my children to make an excurion in the country every day, I have substituted any kind of yehicle which could be procured.

The cure of this disease, when it appears, may be commenced by the mother, by giving the child five grains of calomel; the purging of which to be promoted by giving fresh meat tea. The disease is often kept up by the irritating, offensive matter in the bowels; and therefore the bowels are to

be kept open by active medicines, until the high action subsides. There should be given daily, every two hours, about a quarter of a tea spoonful of prepared chalk, (which is common chalk powdered and washed well,) for the purpose of correcting the offensive nature of the contents of the bowels. A little salt of tartar, or ley, will answer; also finely powdered charcoal, or crust of bread burnt black, either taken in a little milk. A most important remedy, which ought to be resorted to in every instance, is cupping the right side, opposite the liver. This cupping had better be after the skin is a little scarified, or cut skin deep with a sharp lancet; if not, dry cupping will do some good. Any one can perform the operation, by taking a common glass, or opened mouthed gourd, then a small piece of burnt paper, which is to be lighted, and put in the vessel, and while the paper is in full blaze, the cup is to be applied to the part, and as the air is consumed, the parts are drawn. By a large mouthed tube, or a trumpet applied to the part, one may often suck out blood, if none will cup. This cupping may be extended to every part of the body, especially the lower extremities; it is for the purpose of drawing off the blood from the interior, and should be daily tried in every case. After a second purge is given to the child on the second day, if the lax continue, one grain of calomel with one drop of laudanum, should be given twice a day, for three or four days: in these cases, the calomel will not be apt to salivate. The child should not be removed until recovery, as rest is important for cure. After the disease has continued for some time, apply brandy on the belly. The tincture of Spanish flies, or a blister applied for an hour or two to redden the skin of the belly, on the wrists, and on the legs, will be of great service. The child should be removed to the country as soon as its disease subsides. By such treatment, occasionally aided by the warm bath in the beginning, children may generally be cured; but I would always recommend the employment of a physician, if the first dose of calomel, with cupping, do not relieve.







